Sprint

Sprint PCS® Service

Sprint PCS Vision℠ Smart Device
Treo™ 650 by palm

www.sprint.com

Table of Contents

Welcome to Sprint

We are committed to bringing you the best wireless technology available. With Sprint, all your services work the same wherever you go on the network. We built our network right from the start, so no matter where you are on the network, all your services – whether it's Voicemail, Caller ID, email, or Picture Mail – will work the same.

This guide will familiarize you with our technology and your new Sprint PCS Vision Smart Device through simple, easy-to-follow instructions. Go to Section 1: Getting Started to set up your new device and Sprint PCS Service, then get ready to explore all the advanced features of your Sprint PCS Vision℠ Smart Device Treo™ 650 by Palm.

Welcome and thank you for choosing Sprint.

How to Use This Guide

We know you're eager to start using your device right away, and the sections of this guide are designed to help you do just that.

- **Section 1: Getting Started** guides you through setting up your new Sprint PCS Vision Smart Device, your Sprint PCS Service, and your computer.

- **Section 2: Your Sprint PCS Vision Smart Device** shows you the basics of your device and service with quick, easy-to-follow instructions. This section also guides you through using the built-in, full-featured, Palm Powered™ organizer that gives you instant access to your Calendar, Tasks, Memos, RealPlayer®, Calculator, and more.

- **Section 3: Sprint PCS Service Features** shows you how to use the Sprint PCS service features, such as voicemail, call waiting, and call forwarding, as well as the how to use Sprint PCS Vision features, including Sprint PCS Picture Mail℠, Web browsing, Messaging, and email.

- **Section 4: Help** answers frequently asked questions and shows you what to do if something goes wrong. It also includes a helpful glossary of terms.

- **Section 5: Safety and Terms and Conditions** outlines recommended safety and maintenance guidelines and displays the terms and conditions of your Sprint PCS Service and your device warranty information.

Where to Learn More

A quick introduction to your new Treo 650:

♦ **Quick Tour** teaches you how to use many features of your Treo 650. It is already installed on your Treo device and you can open it any time (see "Opening the Quick Tour" on page 250).

♦ **Additional Tips and Shortcuts for Keyboard Navigation** provides a list of time-saving shortcuts, tips, and tricks. This handy booklet is included in the box with your Treo 650.

While using your Treo 650:

♦ **Tips** for getting the most out of your Treo 650 are available in many of the built-in applications. To view these tips, open an application, open the **menus**, select **Options**, and then select **Tips**.

♦ **Information** is available in many dialog boxes that have a **Tips** icon in the upper-right corner. Select the **Tips** icon to learn about the tasks you can perform in that dialog box.

If you need more information:

♦ **Books** on Palm OS® devices, such as "Now You Know Treo," are available at local or online book retailers (look in the computers section), or visit www.palm.com.

- ◆ **Online forums** let you consult online user discussion groups to swap information and learn about areas you may not find elsewhere. Visit **www.palm.com** for details.

- ◆ **Sprint Customer Service** is where you go with questions about your mobile account or Sprint PCS Service and to contact Sprint for the latest information and help. Visit **www.sprint.com** for instant access to new Sprint PCS Service features and information.

Getting Started

Sprint

Setting Up Your Sprint PCS Vision℠ Smart Device Treo™ 650 by Palm® Software Installation CD

In This Section

- **What You Need**
- **Inserting the Battery**
- **Charging the Battery**

What You Need

You should have received all of the following components in the Treo 650 box:

Hardware
- Treo handset
- AC adapter charger
- USB sync cable
- Headset
- Sprint® charger adapter

Documentation
- Before You Start Using Your Sprint PCS Vision Smart Device
- User's Guide (this book)
- Additional Tips & Shortcuts for Keyboard Navigation

Software
- Palm Software Installation CD (includes desktop synchronization software and bonus software for your device)

Other

As you work through the instructions in this section, you'll also need the following items:
- An electrical outlet
- The computer with which you will synchronize your personal information

Inserting the Battery

1. Press the **Battery Door Release** button and slide the battery door downward to remove it from your Treo 650.

2. Align the metal contacts on the battery with the contacts inside the battery compartment.

3. Insert the battery into the compartment at a 45 degree angle, and then press it into place.

4. Slide the battery door onto the back of the device until it clicks into place.

5. When the Welcome screen appears, follow the onscreen instructions to set up your Treo 650.

Battery Door Release

Battery Contacts

Phone Contacts

Notch
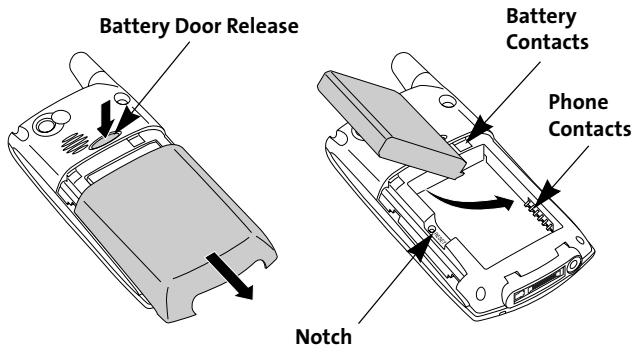
Charging the Battery

You must charge your Treo 650 fully before using it. It may not turn on at all when you first remove it from the box.

1. Plug the AC charger into a wall outlet.
2. Connect the charger cable to the bottom of the Treo device. Make sure the arrow on the connector is facing up, towards your Treo screen.
3. Wait for the indicator light to turn solid green. This may take up to four hours.
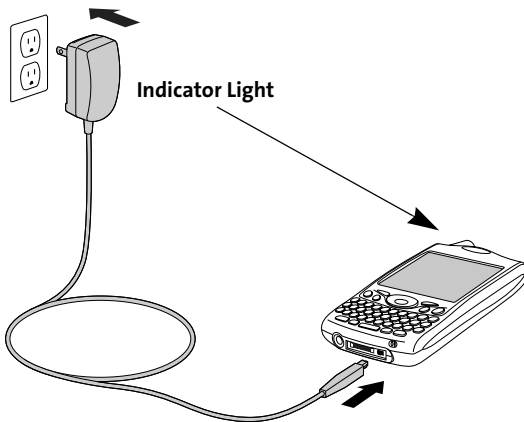
Indicator Light

| **Important:** | It is vital that you use only Sprint-approved AC adapter chargers, car chargers, and replacement batteries. Use of unauthorized accessories could damage your device and invalidate your warranty. |

Check the indicator light to make sure your Treo 650 is charging. If the battery is fully drained, it may take a few moments for the indicator light to turn on while charging. When your Treo 650 is connected to a power source, the indicator light glows solid (versus flashing), and the color of the light indicates the following:

- **Red indicator light**: battery is charging.
- **Green indicator light**: battery is fully charged.
- **Indicator light off**: battery is not charging. Check the cable connection and the outlet to which it is connected.

After you set up your Treo, the onscreen battery icon displays power status:

- **Full battery icon** : battery is charged.
- **Partial battery icon** : battery has some power but is not fully charged.
- **Empty battery icon** : battery needs charging immediately.
- **Red lightning bolt** : battery is charging.
- **Green lightning bolt** : battery is fully charged.

Using a Sprint Charger Adapter

If the connector on your Sprint-approved 1 Amp AC charger or vehicle charger doesn't fit into the connector on the bottom of your Treo device, use the included Sprint charger adapter.

Warning:	Use only with 1 Amp AC adapters distributd by Sprint for Treo 650. Using any unapproved AC adapter may destroy the AC adapter and cause fire.

1. Plug the charger to a power source.
2. Connect the Sprint charger adapter to the bottom of the Treo 650.
3. Connect the charger cable to the Sprint charger adapter.
4. Charge your Treo 650 as described earlier.

Sprint charger adapter
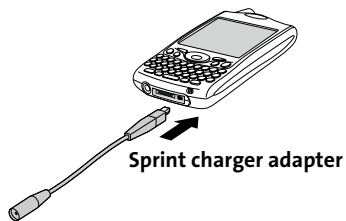
Battery life

Battery life depends on individual use. Consumption factors include signal strength, speakerphone use, and whether calls are data or voice calls.

When your device's phone is on, the Treo battery provides up to 4.5 hours of talk time on the Sprint PCS 1900 MHz band. Talk time is slightly lower when roaming on the cellular 800 MHz band.

If the battery drains to the point where your Treo 650 doesn't turn on, the Treo device stores your information safely until you recharge the battery. To avoid draining the battery, we recommend that you charge and synchronize your Treo 650 every day, especially if you use the wireless features of your device often.

Note:	Using your device's phone has an effect on the battery life. You can extend the battery life by turning off your device's phone while using the organizer features. In any case, regular charging is recommended for optimal performance.

Maximizing battery life

You can increase the life of your Treo 650 battery by following a few easy guidelines. Remember that battery life depends on how you use your Treo device.

- Charge your Treo 650 whenever you're at your desk, or charge it overnight each day. The Lithium Ion (Li-Ion) battery has a much longer useful life when it is topped off frequently, rather than charging it after it is fully drained.

- The wireless features of your Treo 650 (phone, email, messaging, and Web) consume more power than its organizer features. However, if you spend a lot of time using the camera (if included), games, media players, eBooks, or other Palm OS® applications, keep an eye on the battery level and charge when necessary.

- If you don't plan to use the wireless features on your Treo 650 for awhile, you may want to turn off your device (see "Turning Your Device's Phone On and Off" on page 35). You can forward calls to a different number or let all calls be picked up by voicemail (see "Call Forwarding" on page 173).

- As with any mobile phone, if you are in an area with no wireless coverage, your Treo 650 searches for a signal, which consumes power. If you cannot move to an area of better coverage, you may wish to temporarily turn off your device's phone (see "Turning Your Device's Phone On and Off" on page 35).

- Turn down the screen brightness (see "Adjusting the Brightness" on page 147).

- Decrease the Auto-off setting in Power Preferences (see "Power Preferences" on page 155). This turns off your screen automatically after a shorter period of inactivity.

Setting Up Service

In This Section

♦ **Getting Started With Sprint PCS Service**

♦ **Setting Up Your Voicemail**

♦ **Sprint PCS Account Passwords**

♦ **Getting Help**

Setting up service on your new Sprint PCS Vision℠ Smart Device Treo™ 650 is quick and easy. This section walks you through the necessary steps to unlock your device, set up your voicemail, establish passwords, and contact Sprint for assistance with your Sprint PCS Service.

Getting Started With Sprint PCS Service

Determining if Your Device's Phone is Already Activated

If you received your device in the mail or purchased it at a Sprint Store, it probably has already been activated. All you need to do is unlock it.

If your phone is not activated, please call Sprint at 1-888-211-4PCS (4727).

Unlocking Your Device

To unlock your device, follow these easy steps:

1. Press and hold the **Power/End** button 🕭 to turn the phone on.
2. Press **Center**.
3. Enter your four-digit lock code. (For security purposes, the code is not visible as you type.)

Note:	If you can't recall your lock code, try using the last four digits of either your Social Security number or Sprint PCS Phone Number or try 0000. If none of these work, call Sprint Customer Service at 1-888-211-4PCS (4727).

Setting Up Your Voicemail

All unanswered calls to your Sprint PCS Vision Phone are automatically transferred to your voicemail, even if your phone is in use or turned off. Therefore, you will want to set up your voicemail and personal greeting as soon as your device's phone is activated.

To set up your voicemail:

1. Press and hold ⬛.

2. Follow the system prompts to:
   - Create your password
   - Record your greeting
   - Record your name announcement
   - Choose whether or not to activate Skip Pass Code (a feature that lets you access your voicemail simply by pressing and holding ⬛, bypassing the need for you to enter your password)

Note:	The voicemail setup process may vary in certain Affiliate areas.

For more information about using your voicemail, see "Using Voicemail" on page 170.

Sprint PCS Account Passwords

As a Sprint PCS customer, you enjoy unlimited access to your personal account information, your voicemail account, and your Sprint PCS Vision account. To ensure that no one else has access to your information, you will need to create passwords to protect your privacy.

Account Password

If you are the account owner, you'll have an account password to sign on to **www.sprint.com** and to use when calling Sprint Customer Service. **Your default account password is the last four digits of your Social Security number.** If you are not the account owner (if someone else pays for your Sprint PCS Service), you can get a sub-account password at **www.sprint.com**.

Voicemail Password

You'll create your voicemail password when you set up your voicemail. See "Setting Up Your Voicemail" on page 13 for more information on your voicemail password.

Sprint PCS Vision Password

If you have a Sprint PCS Vision Phone, you can set up a Sprint PCS Vision Password. This optional password may be used to authorize purchase of Premium Services content and to protect personal information on multi-phone accounts.

For more information or to change your passwords, sign on to **www.sprint.com** or call Sprint Customer Service at 1-888-211-4PCS (4727).

Getting Help

Visit Our Website

You can get up-to-date information on Sprint PCS Services and Options by signing onto our Website at www.sprint.com.

When you visit us online, you can

- Review coverage maps
- Learn how to use voicemail
- Access your account information
- Purchase accessories
- Add additional options to your service plan
- Check out frequently asked questions
- And more

Reaching Sprint Customer Service

You can reach Sprint Customer Service many different ways:

- Dial ✱ 2 , and then press **Phone/Send** 📞 on your Sprint PCS Phone
- Sign on to your account at www.sprint.com
- Call us toll-free at 1-888-211-4727 (Consumer customers),
  –or–
  1-888-788-4727 (Business customers)
- Write to us at Sprint Customer Service, P.O. Box 8077, London, KY 40742

Receiving Automated Invoicing Information

For your convenience, your phone gives you access to invoicing information on your Sprint PCS Account. This information includes balance due, payment received, invoicing cycle, and the number of minutes used since your last invoicing cycle. (Normal airtime usage will apply.)

To access automated invoicing information:

▶ Press *** 4**, and then press **Phone/Send** 📞.

Note:	This service may not be available in all Affiliate areas.

Sprint PCS Directory Assistance

You have access to a variety of services and information through Sprint PCS Directory Assistance, including residential, business, and government listings; assistance with local or long-distance calls; movie listings; and hotel, restaurant, shopping, and major local event information. There is a per-call charge and you will be billed for airtime.

To call Sprint PCS Directory Assistance:

▶ Press **4 1 1**, and then press **Phone/Send** 📞.

Sprint PCS Operator Services

Sprint PCS Operator Services provides assistance when placing collect calls or when placing calls billed to a local telephone calling card or third party.

To access Sprint PCS Operator Services:

▶   Press ⬤ , and then press **Phone/Send** ☎.

For more information or to see the latest in products and services, visit us online at <u>www.sprint.com.</u>

Note:	Sprint PCS Operator Services may not be available in all Affiliate areas.

Connecting to Your Computer

In This Section

♦ **Preparing Your Computer**

♦ **Connecting Your Treo 650 to Your Computer**

♦ **Installing the Synchronization Software on Your Computer**

Computer Connection

Preparing Your Computer

Synchronization allows you to enter information on your computer in an application called Palm® Desktop software or in Microsoft Outlook and then efficiently transfer that information to your Sprint PCS Vision℠ Smart Device Treo™ 650. At the same time, changes you make on the Treo 650 are transferred to Palm Desktop or to Microsoft Outlook. Even if you manage all your contacts on your Treo 650, synchronization is a great way to back up your information.

Before you can synchronize, you need to install the desktop synchronization software on your computer. Even if you already own a Palm Powered™ device and have installed a previous version, you need to install the Software Installation CD that comes with your Treo 650.

We strongly recommend that you install the desktop synchronization software soon after you start using your Treo 650 and that you synchronize your device and computer frequently to keep your information up-to-date (and backed up) in both locations.

System Requirements

Your computer should meet the following minimum system profiles for Windows or Mac computers.

Windows computers

- Windows 2000 or XP*
- 32MB of available memory (RAM)
- 170MB of free hard disk space
- CD drive

- Available USB port
- USB sync cable (included with your Treo 650)

Mac computers
- Mac OS X 10.2 –10.3*
- 128MB of total memory (RAM)
- 190MB of free hard disk space
- CD drive
- Available USB port
- USB sync cable (included with your Treo 650)

* Later versions may also be supported

Connecting Your Treo 650 to Your Computer

Important:	If you're upgrading from another Palm Powered device, follow the upgrade steps on page 251 before you set up your computer for your new Treo 650.

1. Plug the AC charger into a wall outlet.

2. Plug the USB sync cable into an available USB port or a powered USB hub on your computer.

3. Connect the sync cable to the Multi-connector on the bottom of your Treo 650 with the HotSync® button facing up. Do not press the HotSync button until you are instructed to do so.

4. Connect the charger cable to the Multi-connector on the sync cable.



Multi-connector

Computer Connection
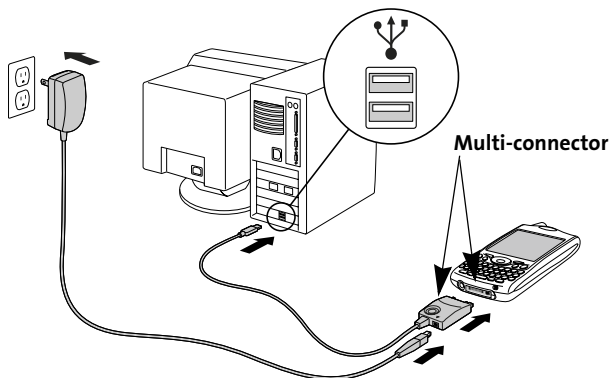
Installing the Synchronization Software on Your Computer

Your computer needs to have all its resources available to install the software. Follow these guidelines for a successful installation:

Note:	If you are installing on a computer at work, make sure your company allows you to install new software. Contact your company's IT department for help.

1. Exit any applications that are currently running on your computer, including those running in the background.

2. Insert the **Software Installation CD** that came with your Treo 650 into the CD drive on your computer. (If you are installing on a Mac, double-click the **CD** icon on the desktop, and then double-click the **palmOneSoftware.pkg** icon.)

3. Follow the onscreen instructions of the installation program. During the installation process, you will be prompted to synchronize for the first time. To synchronize, press the **HotSync** button on the **Multi-connector**.

HotSync Button

Computer Connection
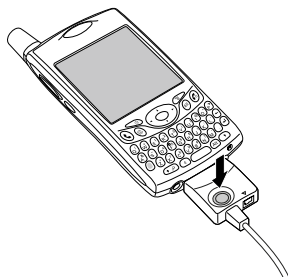
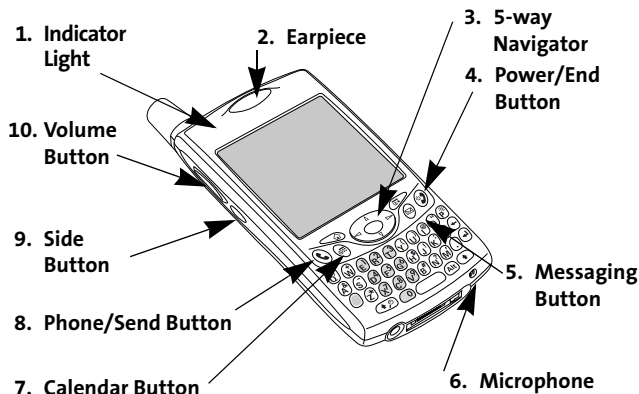# Your Sprint PCS Vision Smart Device

Sprint®

Learning the Basics

In This Section

- ♦ **Your New Sprint PCS Vision Smart Device**
- ♦ **Turning Your Device's Phone On and Off**
- ♦ **Moving Around the Treo 650 Screen**
- ♦ **Using the Keyboard**
- ♦ **Opening Applications**
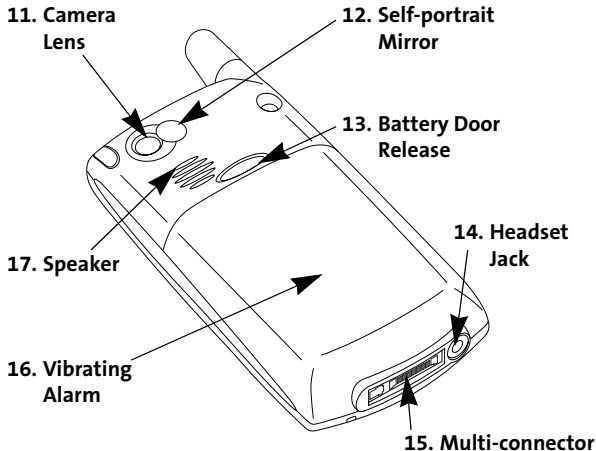
Your New Sprint PCS Vision Smart Device

Your Device's Features: Front View

1. Indicator Light

2. Earpiece

3. 5-way Navigator

4. Power/End Button

10. Volume Button

9. Side Button

8. Phone/Send Button

7. Calendar Button

5. Messaging Button

6. Microphone

1. **Indicator Light** provides status information for your Treo 650 based on the color of the light and the blink state.

2. **Earpiece** serves as the handset speaker on your Treo 650.

3. **5-way Navigator** lets you move around the Treo 650 screen and select options.

4. **Power/End Button** turns the device's phone on and off, wakes up and turns off the screen, and hangs up calls.

5. **Messaging Button** opens the Messaging application. If you downloaded and installed Business Connection, this button opens Business Connection.

6. **Microphone** serves as the mouthpiece on your device's phone.

7. **Calendar Button** opens the Calendar application.

8. **Phone/Send Button** opens the Phone application and dials when a phone number is selected.

9. **Side Button** performs context sensitive actions, such as playing or pausing MP3 files in the RealPlayer® application. You can also reassign this button to open your favorite application.

10. **Volume Button** adjusts the earpiece, speaker, and ringer volume levels.

Your Device's Features: Back View

11. Camera Lens

12. Self-portrait Mirror

13. Battery Door Release

14. Headset Jack

17. Speaker

16. Vibrating Alarm

15. Multi-connector

11. **Camera Lens** enables you to take pictures using the built-in camera (if included). There are two models of the Treo™ 650: one comes with a camera and the other does not come with a camera. The packaging for your Treo 650 identifies whether a camera is included.

12. **Self-portrait mirror** enables you to take a picture of yourself (if your device includes a camera).

13. **Battery Door Release** opens the battery compartment.

14. **Headset Jack** enables you to connect a hands-free headset. Use only headsets that are compatible with your device.

15. **Multi-connector** enables you to attach the USB sync cable and AC charger to your device.

16. **Vibrating Alarm** notifies you when you receive a call or message, or when an alarm goes off and the ringer is set to silent.

17. **Speaker** plays ringtones and alarms and serves as the speaker for the speakerphone feature.

Note:	The Treo 650 speaker includes a large magnet, so be sure not to store your Treo device near credit cards or other items that could become demagnetized.

Your Device's Features: Top View

18. Ringer Switch

19. Infrared (IR) Port

20. Antenna

22. Stylus

21. Expansion Card Slot
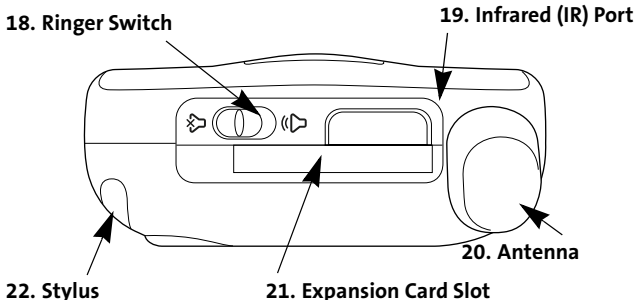
18. **Ringer Switch** controls the ringer setting. See "System Sound Settings" on page 145 for details on changing the settings. Silencing the ringer turns off all system sounds, including alarms.

19. **Infrared (IR) Port** uses infrared technology to transmit information to and receive information from other infrared-enabled devices that use compatible software.

20. **Antenna** receives and sends wireless communication signals. The antenna does not telescope out of your device.

21. **Expansion Card Slot** allows you to expand the capabilities of your device using a MultiMediaCard, Secure Digital (SD), or SDIO card. See "Using Expansion Cards" on page 133 for details on using expansion cards.

22. Stylus allows you to tap options on your device's screen. To use the stylus, slide it out of the slot and hold it as you would a pen or pencil.

Turning Your Device's Phone On and Off

You can use the Palm OS® features of your Treo 650 independently of the wireless features and applications. Therefore, the screen phone and device are designed to be turned off and on separately.

Turning Your Device's Phone ON

When you turn on your device's phone, it connects to the Nationwide Sprint PCS Network so that you can make and receive phone calls and use other wireless services.

▶ Press and hold the **Power/End** button 📞 to turn on your phone. (You will hear a series of ascending tones and see a "Welcome" screen. After your device locates a signal, you can begin making and receiving calls and using the Internet features, if supported by the local network.)

Tip:	The indicator light flashes green when your device is on and you are inside a Nationwide Sprint PCS Network coverage area. If you are outside a coverage area, the indicator light flashes amber.

Turning Your Device's Phone OFF

When your device's phone is off, it is not connected to the Nationwide Sprint PCS Network. You can still use its other Palm OS features. This is ideal for airplane flights and for maximizing battery life.

▶ Press and hold **Power/End** 📞 to turn off your phone. (You will hear a series of descending tones and see a "Powering off" screen.)

Waking Up the Screen

To use the Palm OS features when your phone is off, you need to wake up the screen. You can also turn off your device's screen without turning off your device's wireless features.

1. Press **Power/End** ⟨⟨📞⟩⟩ to wake up the screen.

2. Press **Power/End** ⟨⟨📞⟩⟩ again to turn off the screen.

| Note:	You can also press any of the application buttons on the front of your device to wake up the screen and to go directly to the application associated with that button.

Moving Around the Treo 650 Screen

To move around the Treo 650 screen, you can use the 5-way navigator ⊚ or tap items on the screen with the stylus. With use, you will find your own favorite way to scroll, highlight, and select menu items.

Note:	Some third-party applications may not work with the 5-way navigator and you must use the stylus instead. In this guide, we use arrow icons to indicate directions on the 5-way navigator. These arrows are different from any onscreen scroll arrows or pick list arrows.

The 5-way navigator ⊚ includes **Right ▶**, **Left ◀**, **Up ▲**, **Down ▼**, and **Center** buttons.
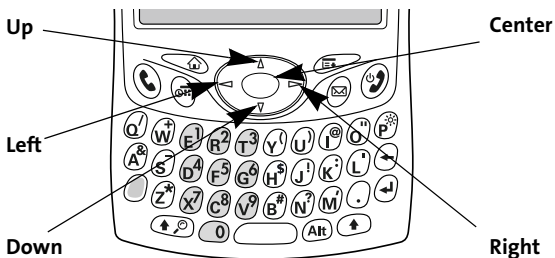
Scrolling Through Screens

As on a computer, you scroll on the Treo 650 to move from field to field, or page to page, or in some cases, to highlight an item or option in a list. There are several methods of scrolling:

● Press the **5-way** ◎ on the front of the Treo 650. Pressing **Right** ▶, **Left** ◀, **Up**
   ▲, and **Down** ▼ moves to the next field, button, or action in that direction.

● Press and hold **Up** ▲ to quickly scroll to the top of a list, or press and hold
   Down ▼ to quickly scroll to the bottom of a list.

● Tap an onscreen scroll arrow:
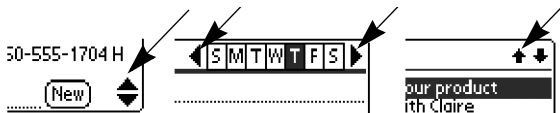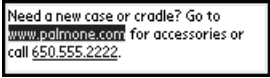
● When viewing a list screen, such as the **Memo** list:

   ■ Press **Up** ▲ and **Down** ▼ to scroll one screen at a time.

   ■ Press **Center** and then press **Up** ▲ and **Down** ▼ to scroll between
     line items.

   ■ Press **Left** ◀ to switch from item scrolling to screen scrolling.

● Press **Option** ◉ and **Up** ▲ and **Down** ▼ to scroll to the next page of
   information within the current record.

● When inside a text field, press **Right** ▶ and **Left** ◀ to scroll to the character or
   word, and press **Up** ▲ and **Down** ▼ to scroll between lines.

- Drag the slider of an onscreen scroll bar.

Highlighting Items

The 5-way ⌾ lets you highlight items before opening or selecting them. Experiment with using the 5-way to highlight different screen elements.

- When an onscreen button (**OK**, **Cancel**, etc.) or pick list is highlighted, the button acquires a glow around its border.

> OK

- When a phone number, email address, or Web link is highlighted on a Web page or in a message, the text appears in reverse type (light text on a dark background).

> Need a new case or cradle? Go to www.palmone.com for accessories or call 650.555.2222.

- When an entire text entry field is highlighted, you can press **Center** to edit the text. After you edit the text, press **Center** again to highlight the entire field.

- You can also use the stylus to highlight text on the screen. When text is highlighted it appears in reverse type. You can highlight text in three different ways:
    - Drag the stylus across the text you want to highlight.
    - Double-tap a word to highlight it.
    - Triple-tap a line of text to highlight it.

Accessing Command Buttons

Command buttons, such as **New**, **OK**, and **Details**, appear at the bottom of the screen. In many cases you can jump directly to these buttons instead of scrolling to them.

- From a list screen, such as the **Contacts** list, press **Right** ▶ to jump to the first button.

- From a screen where you create or edit entries, such as **Edit Contacts**, press **Center** to jump to the first button.

- From a dialog box, such as **Edit Categories**, press **Up** ▲ or **Down** ▼ to scroll to the buttons.

Selecting or Activating Items

After highlighting an item with the **5-way** ⊙, you can select or activate it by pressing **Center**. You can also select an item by tapping it with the stylus.

Selecting Menu Items

Many applications have menus to provide access to additional features. These menus are usually hidden from view, but they appear when you press **Menu** ✐. To get the most out of your Treo 650, it's a good idea to familiarize yourself with the additional features available through the various application menus.

1. Press **Menu** ✐ to open an application's menus.

2. Press **Right** ▶ and **Left** ◀ to switch between menus.

3. Press **Up** ▲ and **Down** ▼ to highlight a menu item.

4. Press **Center** to select the menu item or press **Menu** ✐ to close the menu and cancel your selection.

| **Tip:** | Menu shortcuts appear next to the commands in most menus. To use a menu shortcut, press **Menu** plus the menu shortcut letter. You don't have to see the menu item to use the menu shortcut. |

Selecting Options in a Pick List

A range of options is often presented in a type of menu called a pick list, which can be identified by a downward-pointing arrow to the left of the currently selected choice. You can select an option from a pick list by doing one of the following:

- Use the **5-way** ⬬ to highlight the pick list and press **Center** to display the items in the list. Press **Up** ▲ and **Down** ▼ to highlight the item you want and press **Center** to accept your selection. To exit the pick list and cancel your selection, press **Left** ◀ or **Right** ▶.
- Use your stylus to tap the pick list, and then tap the item you want from the list.

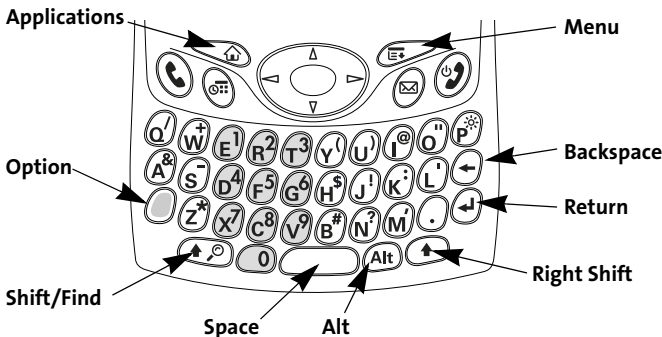| **Tip:** | You can jump to an item in a pick list by using the keyboard to enter the first letter of the item you want to select. |

Pick list

Using the Keyboard

When using the keyboard, most people find it easiest to hold the Treo 650 with two hands and use the tips of both thumbs to press the keys.

Using the Keyboard Backlight

The Treo 650 includes a keyboard backlight for low light conditions. The keyboard backlight activates automatically when the screen turns on. It turns off automatically when the screen turns off and when an active call lasts longer than a minute.

Entering Lowercase and Uppercase Letters

- To enter lowercase letters, press the desired keys.

- To enter an uppercase letter, press **Shift/Find** 🔍 or **Right Shift** ⬆, and then enter a letter. You don't need to press and hold Shift while entering uppercase letters.

- To turn Caps Lock on, press **Shift/Find** 🔍 or **Right Shift** ⬆ twice. To turn it off, press **Shift/Find** 🔍 or **Right Shift** ⬆ again. When Caps Lock is on, this symbol appears in the lower right: ⬆

Entering Numbers, Punctuation, and Symbols that Appear Above the Letters on the Keys

- Press **Option** ⭕, and then press the key with the desired character shown above the letter. You don't need to press and hold **Option** ⭕ while pressing the second key.

- To turn Option Lock on, press **Option** ⭕ twice. To turn it off, press **Option** ⭕ again. When Option Lock is on, this symbol appears in the lower right: ●

| **Tip:**	Some application views automatically default to Option Lock, such as the Dial Pad of the Phone application, or the Calculator. In this case, you do not have to press and hold **Option** to enter numbers.

Entering Other Symbols and Accented Characters

1. Enter the character that corresponds to the symbol or accented character you want. (See the table on the next page.)

2. Press **Alt** (Alt).

3. Press **Up** ▲ or **Down** ▼ to highlight the desired character.

4. Press **Center** to insert the character, or just continue entering the next character.

Tip:	In many applications you can view a list of all the alternate characters. Open the Edit menu, and then select **Keyboard Help**. The alternate characters are grouped according to their similarity to the corresponding key. For example, the alternate characters available for the e key are é, è, ë, ê and €.

Other Symbols and Accented Characters

Enter ...	...then press ⒶⓁⓉ to select...
a	á à ä â ã å æ
A	Á À Ä Â Ã Å Æ
b or B	ß
c	ç ¢ © ^ ˇ
C	Ç ¢ © ^ ˇ
d	† ‡
D	† ‡ Ð
e	è é ë ê €
E	È É Ë Ê €
f or F	ƒ
i	ì í ï î
I	Ì Í Ï Î
l or L	£
m or M	µ
n	ñ
N	Ñ
o	ò ó ö ô œ õ ø

Enter ...	...then press ⒶⓁⓉ to select...
U	Ù Ú Ü Û
x or X	× ¤
y	ý ÿ ¥
Y	Ý Ÿ ¥
0	% ‰ º
1	¹ ¼ ½
2	²
3	³ ¾
.	? ! ...
,	„
!	¡
?	¿
:	; :-) :-(;-) :-D
'	' ' ‹ › ~ `
"	" " « »
$	€ £ ¥ ¢
+	&

Enter ...	...then press (Alt) to select...
O	Ò Ó Ö Ô Œ Õ Ø
p or P	% ¶
r or R	®
s	ß š § ℓ̄
S	ß Š § ℓ̄
t or T	~ ™ † ‡
u	ù ú ü û

Enter ...	...then press (Alt) to select...
-	_ ~ • = – —
/	% \ ÷ ¦ ╱
#	=
(	‹ [{ ‹
)	›] } ›

Opening Applications

There are three application buttons on the front of the Treo 650. The fourth button turns your device on and off, wakes up the screen, and controls the keyguard. Each application button can be used to open two applications. To access a button's primary application, simply press the button. To access a button's secondary application, press **Option** ⟨⟩, and then press the application button.

Phone/Send   **Calendar**   **Messaging**   **Power/End**
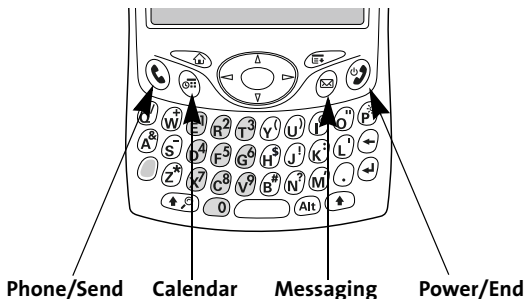
Button	Primary Application	Secondary Application
⟨📞⟩	Phone/Send	⟨⟩ + ⟨📞⟩ Web browser
⟨📅⟩	Calendar	⟨⟩ + ⟨📅⟩ World Clock

Button	Primary Application	Secondary Application
✉	Messaging	⬤ + ✉ VersaMail*
☎	Power/End	⬤ + ☎ Keyguard

Note:	The Messaging button opens Sprint PCS Business Connection if you downloaded and installed Sprint PCS Business Connection on your device. You can also customize the buttons yourself. See "Button Settings" on page 151 for details.

You can access all available applications through the **Applications** view.

To access applications through the Applications view:

1. Press **Applications** ✎.
2. Use the **5-way navigator** ◎ to highlight the application you want to open.
3. Press **Center** to open the selected application as described in "Moving Around the Treo 650 Screen" on page 37.
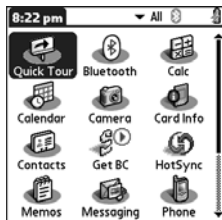
In **Applications**, you can also do any of the following:

- Press **Applications** ⊘ repeatedly to cycle through different categories of applications.
- Enter the first few letters of the application's name to highlight it. For example, if you enter "p," the device highlights **Phone**; if you then enter "r," it highlights **Prefs**. If you pause and then enter "r," it highlights the first application that starts with "r."

Using Your Device's Phone Features

In This Section

- ♦ **Making Calls**
- ♦ **Receiving Calls**
- ♦ **Signal Strength and Phone Status**
- ♦ **Managing Active Calls**
- ♦ **Controlling Your Roaming Experience**
- ♦ **Internal Phone Book**
- ♦ **Defining Favorite Buttons**
- ♦ **Using a Phone Headset**
- ♦ **Connecting to Devices With Bluetooth® Wireless Technology**
- ♦ **Using Dial-up Networking on Your Treo 650**

Making Calls

Your Sprint PCS Vision℠ Smart Device Treo™ 650 offers several options for making phone calls. As you get familiar with your Treo 650, you'll find the method you prefer.

Important:	Before making a call, make sure your device is on (see steps on page 35). If **No Service** appears in the upper-left, you are out of a wireless coverage area. If you believe you are in a wireless coverage area and this problem persists, contact Sprint for assistance.

Dialing Using the Onscreen Dial Pad

Note:	If you selected **Show Wallpaper** in the **General Preferences** dialog box of the Phone application (see "Selecting Wallpaper for the Phone Screen" on page 144), you can still access the Dial Pad. From the **Main** view of the Phone application, press **Phone/Send,** and then select **Dial Pad**.

1. Press the **Phone/Send** 📞 button.
2. Tap the numbers on the onscreen Dial Pad.
3. Press **Phone/Send** 📞 to dial.

Tip:	You can also paste numbers directly into the **Dial Pad** view. Copy a number from another application, and then switch to **Dial Pad** view. Open the **Edit** menu, and then select **Paste**. Press **Phone/Send** to dial.

Dialing With the Keyboard

1. Press **Phone/Send** 🕾.

2. Using the numbered keys on the keyboard, start dialing a phone number. (You don't need to press **Option** 🖉 to enter numbers when dialing.)

3. Press **Phone/Send** 🕾 to dial.

Tip:	If you make a mistake while dialing, press **Backspace** to erase one digit at a time or select **Cancel** to start over.

Dialing by Contact Name

Before you can dial a call by contact name, you must create some contacts (see "Adding a Contact" on page 67), or import them from your computer by synchronizing (see "Synchronizing Contacts and Other Information" on page 124).

1. Press **Phone/Send** 🕾.

2. Select the **Contacts** favorite button.

3. Using the keyboard, begin entering one of the following for the contact:

- First initial and last name
- First name
- Last name

4. Select the number you want to call and press **Phone/Send** 📞 to dial.

| **Tip:** | To see more details about a contact, highlight the name and press **Center**. To start a new search, press **Backspace** to delete letters or select **Cancel** to return to the **Main** view. |

Dialing With a Favorite Button

Favorite buttons can be used as shortcuts for dialing phone numbers and performing other common tasks. You can use the built-in favorite buttons or see "Defining Favorite Buttons" on page 71 to create some of your own.

1. Press **Phone/Send** 📞.

2. Use the **5-way navigator** 👁 to access **Favorites**.

3. Highlight the desired favorite button.

4. Press **Center** to dial.
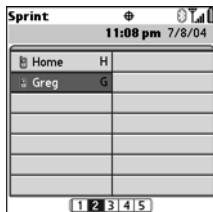
| **Tip:** | To view more favorite buttons, highlight the bottom row of favorites, and then press **Down**. |

Dialing From a Web Page

The Treo 650 recognizes most phone numbers that
appear in Web pages. If you can't highlight and dial a
phone number on a Web page using the 5-way or
stylus, it means that the Treo 650 does not recognize
it as a phone number.

1. Use the **5-way** ⊙ to highlight the phone
   number you want to dial in the Web page or
   message.

2. Press **Center** to open the **Dial** dialog box.

3. Press **Phone/Send** 📞 to dial.
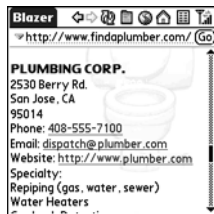
Dialing From Messages

The Treo 650 recognizes most phone numbers that appear in email, text, and
Picture Mail messages. If you can't use the 5-way or stylus to highlight and dial a
phone number from a message, it means that the Treo 650 does not recognize it
as a phone number.

1. Use the **5-way** ⊙ to scroll to the text box.

2. Press **Center** to select the text box.

3. Press **Up** ▲ to highlight the phone number.

4. Press **Center** to open the **Dial** dialog box.

5. Press **Phone/Send** 📞 to dial.
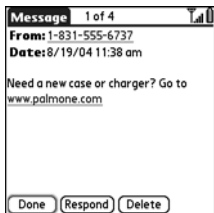
Redialing the Last Number You Called

▶   From the **Main** view in the **Phone** application, press and hold **Phone/Send** Ⓒ.
    –or–

    To display a list of your most recently dialed numbers, press **Phone/Send** Ⓒ,

    select the number you want to call, and then press **Phone/Send** Ⓒ again
    to dial.

Tip:	To view all your recent incoming and outgoing calls in chronological order, select the **Call Log** favorite button, or press **Phone/Send** and then select **Call Log** from the recent call list.

Receiving Calls

To receive calls, your device's phone must be on. This is different from having just the screen turned on (see "Turning Your Device's Phone On and Off" on page 35).

Answering Calls

To answer a call, do one of the following:

► Press **Phone/Send** 📞.

   –or–

   Use the **5-way navigator** ◎ to select the onscreen **Answer** button.

   –or–

   If the headset is attached, press the headset button.

Tip:	To prevent calls from accidentally being answered while the device is in a pocket or briefcase, you can disable the screen's touch-sensitive feature when an incoming call arrives (see "Auto-Keyguard and Touchscreen Lockout" on page 157).

Sending Calls to Voicemail

To ignore a call and send it to voicemail, do one of the following:

► Press **Power/End** 🕮.

   –or–

   Use the **5-way** ◎ to select the onscreen **Ignore** button.

Note:	Do not press **Power/End** to ignore a call waiting alert; this hangs up both the call in progress and the incoming call. Use the 5-way method instead.

Silencing the Ring of an Incoming Call

To silence the ringer while your device is ringing:

► Press the volume button or any key on your Treo except **Phone/Send** 📞

Power/End ⍥, or the **5-way** ◎.

–or–

To immediately silence all system sounds including the ringer, slide the

ringer switch to **Sound Mode Off** ⌔ (see "System Sound Settings" on page 145).

When you silence the ringer, you can either answer the call or let it ring through to voicemail.

If music is playing through the internal speaker or headset, and a call arrives, you can still hear the device ringing softly. The music continues playing, but you won't hear it during your call. To pause the music, press the **Side** button on the side of your Treo 650.

Signal Strength and Phone Status

You can monitor the status of your device's signal strength and several other items, using icons at the top of the Phone screen.

Phone Status Icons

Network name	Displays **Sprint** when your device is on and you're inside the Nationwide Sprint PCS Network. Displays **Roaming** if you roam outside the Nationwide Sprint PCS Network. If you're outside a coverage area, **No service** appears, and when you turn off your device, it displays **Phone Off**.
⊕	Appears with a red slash when location privacy is on and without the slash when location privacy is off.
◢	Appears when call forwarding is active.
T	Appears when TTY/TDD Mode is active.
✉	Appears when you have new voicemail messages. You can select this icon to retrieve your messages.
R	Appears when roaming is active.
ⓧ	Appears in gray when Bluetooth® wireless technology is off. Appears in blue when Bluetooth wireless technology is on. Appears in reverse blue when your device is communicating with other devices using Bluetooth wireless technology. To quickly access the Bluetooth Preferences panel, tap the Bluetooth icon.
⌒	Replaces the Bluetooth icon when your device is connected to a headset that is enabled with Bluetooth wireless technology.

$T_{.ıl}$	Appears with gray arrows when your device is on and connected to the Sprint PCS Vision network. You can still receive calls. Appears with green arrows when your device is connected to the Sprint PCS Vision network and a data session is active (for example, when you are browsing the Web). You cannot receive calls.
$_{.ıl}$	Displays the signal strength. The stronger the signal, the more bars appear. If you are outside a coverage area, no bars appear.
▯	Displays the battery charge status. When the battery drains to 20% of its capacity, the icon changes from blue to red. At 10% of its capacity, you begin to receive warning messages, and at 5% of its capacity, the device beeps and the icon changes from red to clear.
▰	Appears when your Treo 650 battery is charging. The lightening bolt turns from red to green when the battery is fully charged and your device remains connected to the AC charger.
▯	Appears when your Treo 650 battery is fully charged.
▧	Indicates the number of unread Picture and SMS messages. You can select this indicator to go to the Messaging application to read your messages.
✉	Indicates the number of unread email messages. You can select this indicator to go to the VersaMail® application to read your email.
▦	Displays the current (or next) event from the Calendar application. If you have an event conflict during the current time period, a red bar appears next to the event description. To jump to the current event in the Calendar application, select the Calendar status line (see "Displaying Your Calendar" on page 88 for details).

Tip:	To display the remaining battery power, tap the battery icon at the top of the screen.

Finding Your Phone Number

1. Make sure your device's phone is on (see "Turning Your Device's Phone On and Off" on page 35).

2. Press **Phone/Send** 📞.

3. Open the **menus** ✍.

4. Select **Options**, and then select **Phone Info**. (If your phone number isn't listed, consult Sprint to confirm your device is activated.

```
                    Phone Info
      Phone Number: 408-555-1212
      PCS Vision palmone5551212
      Username: palmone1212
      ESN: 36120574
      Software: Treo650-1.0
      Hardware: Treo650
      HS SN: 1234567890123
      PRL Rev: 10024
      PRI Checksum: 0x6792
      (   OK   )
```
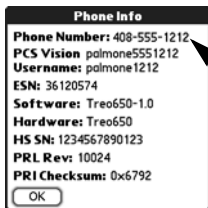
Look here for your phone number

)

Managing Active Calls

When you make or receive a call, the **Active Call** view appears. To toggle between the **Active Call** view and the **Main** view, press **Phone/Send** 📞.

Use the **5-way navigator** ⬭ to access the onscreen buttons in this view and to manage an active call. The following screen appears on your device during an active call:

Current duration of call

Caller's name and number

Dial Pad

Mute
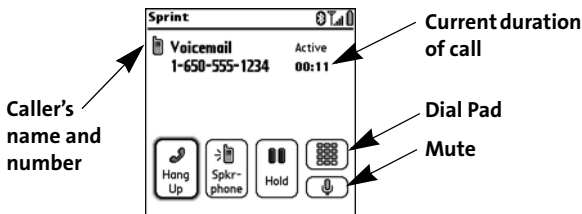
The following is a list of available options during an active call:

📞 Hang Up	Ends the call immediately.
📲 Spkr-phone	Switches to the personal speakerphone. The personal speakerphone makes it easy for you to use other features, such as checking your calendar, during a call.

[Cancel Spkr.]	Returns to handset mode when the speakerphone feature is active.
[headphone icon]	Switches from a headset with Bluetooth wireless technology to the built-in earpiece. This button replaces the Spkr-phone button when a headset with Bluetooth wireless technology is attached.
[Hold]	Places the current call on hold.
[Add Call]	Lets you place another call while keeping the first call active. This button replaces the Hold button when a call is on hold.
[dial pad icon]	Opens the Dial Pad so you can enter extra digits or dial another number.
[Extra Digits]	Dials any extra digits (such as a password or extension) that you assigned to a Speed Dial favorite button. This button replaces the Dial Pad button during outbound calls to numbers that include pre-defined extra digits. See "Creating a Speed Dial Favorite Button" on page 72 for details on creating a Speed Dial favorite button.
[microphone icon]	Mutes the Treo 650 microphone so that you cannot be heard.

Tip:	To avoid accidentally pressing onscreen buttons while holding the device to your ear, you can disable the screen's touch-sensitive feature during active calls (see "Auto-Keyguard and Touchscreen Lockout" on page 157).

Ending a Call

Do one of the following to end a call:

- Press **Power/End** ✆.
- Select **Hang Up**.
- Press the headset button (if the headset is attached).

Tip:	When a call lasts longer than one minute, the screen turns off. Press any key except **Power/End** to wake up the screen, and then press **Power/End** to hang up the call. Be careful not to press **Power/End** to wake up the screen as this will accidentally end the call.

Returning to an Active Call From Another Application

You can use many other applications on your Treo 650 while holding a phone conversation, including the organizer and text messaging features. You cannot browse the Web or send and receive email while on an active call.

► From any application, press **Phone/Send** ✆ to return to the **Active Call** view.

Making a Second Call

You can make a second call while your first call is still active.

1. After dialing the first number, use the **5-way** ⊙ to select **Hold**.

2. Use the **5-way** ⊙ to select **Add Call**.

3. Dial the second number using **Favorites**, **Contacts**, **Dial Pad**, **Call Log**, or **Redial list** (see "Making Calls" on page 52).

4. Press **Power/End** ✆ to end both calls.

Tip:	The **Active Call** view now includes two status lines, each representing one of the calls. You can join the two calls in a conference call, but you cannot switch between the two calls.

Controlling Your Roaming Experience

Your device is digital dual-band, which means you can make and receive calls while on the Nationwide Sprint PCS Network and you can also roam on other digital networks where we've implemented roaming agreements with other carriers.

When you roam outside the Nationwide Sprint PCS Network, the Roaming icon **R** appears at the top of the screen. Additional charges may apply if you use your Treo 650 while roaming.

To learn more about roaming, visit www.sprint.com.

Setting Your Device's Roam Mode

1. Press **Phone/Send** 📞.
2. Open the **menus** ✉.
3. Select **Options**, and then select **Phone Preferences**.
4. Check the **Digital Roaming** box.
5. Select **OK**.

Feature Availability

- You can make and receive calls while roaming.
- You will have access to voicemail while roaming.
- Other features which are standard on the Nationwide Sprint PCS Network, such as Call Waiting, Sprint PCS Voice Command, and Sprint PCS Vision are unavailable while roaming.

Internal Phone Book

The internal phone book is located in the **Contacts** application. If you are familiar with other Palm Powered™ devices, **Contacts** replaces the Address Book on previous devices.

If you have several contacts to enter, it's more efficient to use Palm® Desktop software or Microsoft Outlook on your computer and then synchronize information between the Treo 650 and your computer. For more information, see "Synchronizing Contacts and Other Information" on page 124.

Adding a Contact

1. Press **Phone/Send** 📞.

2. Select the **Contacts** favorite button.

Tip:	You can also open **Contacts** from the **Applications** view. Go to **Applications** and select **Contacts**.

3. Select **New Contact**.

4. Use the **5-way navigator** ◎ to move between fields as you enter information. [Be sure to correctly label your contact's mobile number(s). The Messaging application (see "Messaging" on page 207) only looks up Mobile numbers and email addresses.]

5. To add a Caller ID picture that displays when that person calls, select the **Picture** box. Select **Photos** to add an existing picture to this contact entry, or if your device includes a camera, you can also select **Camera** to take a picture and add it to this contact entry when you save the picture.

6. To place the entry in a category or mark it private, select **Details**.

7. To add a note to an entry, select **Note** ⬜.

8. To display additional fields for this contact, select **Plus** ⊕.

9. After you enter all the information, select **Done**.

Viewing or Changing Contact Information

1. In the **Contacts** list, begin entering one of the following for the contact you want to view or edit:
   - First initial and last name
   - First name
   - Last name

2. Select the name of the entry you want to open.

3. Select **Edit**.

4. Make changes to the entry as necessary, and then select **Done**.

Deleting a Contact

1. Open the contact you want to delete.
2. Open the **menus** ✆.
3. Select **Record**, and then select **Delete Contact**.
4. Select **OK**.

Saving Phone Numbers

After you complete an incoming call from a number (with Caller ID) that is not in your **Contacts** list, you are prompted to add the number to your **Contacts** list. Select one of the following options:

- To add the number, select **Yes**.
- To decline adding the number, select **No**.
- To permanently disable the **Add New Contact** prompt, check the **Never ask me to add new Contacts** box when the prompt appears.

If you don't add a number right away, follow these steps to add it later:

1. In the **Call Log** (see "Redialing the Last Number You Called" on page 56), highlight the number you want to save.
2. Select **Add Contact**. The **Add Contact** button appears only if the phone number does not already exist in your **Contacts** list.
3. Enter the information for the entry.
4. Select **Done**.

Defining Your Business Card

1. Create a new contact using the information on your business card.

2. From **Contact Edit** view, open the **menus** .

3. Select **Record**, and then select **Select Business Card**.

Now you can beam your business card to other Palm Powered devices. In any Phone view, open the **menus** , select **Record**, and then select **Beam Business Card**.

Defining Favorite Buttons

The Treo 650 provides approximately 70 programmable favorite buttons for quick access to the following common tasks:

- Dialing a phone number (speed dial).
- Accessing your Call Log.
- Accessing the onscreen Dial Pad.
- Opening an application.
- Accessing a Web page.
- Addressing a message (text, email or Picture Mail).
- Accessing voicemail (preset on Treo).

For each favorite button, you can also set up a Quick Key that gives you instant access to the phone number or corresponding screen. Quick Keys are optional and can be letters or numbers, but you can't use both the letter and number for the same key. For example, the Voicemail Quick Key is 1. The letter equivalent for that key is E, so you cannot assign E as a Quick Key to another favorite button.

Sprint	⊕	📶📶
	11:08 pm	7/8/04
📇 Home	H	
📇 Greg	G	
1 **2** 3 4 5		
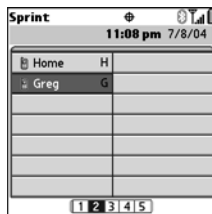
Tip:	If you're upgrading from a previous Treo, your favorite buttons are transferred along with your other info. However, you may need to rearrange the order in which your favorite buttons appear by opening the **Edit** menu, and then selecting **Edit Favorites Pages**.

Creating a Speed Dial Favorite Button

1. Press **Phone/Send** 📞.

2. Use the **5-way navigator** ⬤ to access **Favorites**.

3. Select a blank button.

Tip:	If there are no blank favorite buttons on the current Favorites page, press **Down** or **Right** to scroll through the other pages.

4. Select the **Types** pick list and select **Speed Dial**.

5. Enter a label for the favorite.

   - If the entry is for an existing contact, select **Lookup**. Start entering the contact's last name, and then select the contact when it appears in the lookup list.

   - If the entry is for a new contact, enter the **Label**, press **Down** ▼ and enter the **Number**.

6. (Optional) Enter a **Quick Key**. (When you are in the **Main**, **Dial Pad**, or **Favorites** view of the Phone application, press and hold the Quick Key to instantly open the favorite.)

7. (Optional) Select the **Ringtone** pick list and select a special ringtone for incoming calls from that contact.

8. (Optional) Select **More**, and then select advanced options:

   - **Extra Digits** lets you define additional digits to dial, such as a password or extension.
   - **Dial Extra Digits Automatically** dials pre-defined Extra Digits immediately after dialing the phone number, when checked.

9. Select **OK**.
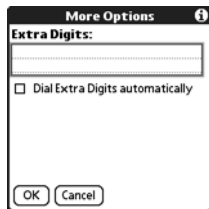
| **Tip:** | To view all the contact numbers for the selected person or business, highlight the **favorite** button, and then press **Space**. |

Creating Other Types of Favorite Buttons

1. Press **Phone/Send** 📞.
2. Use the **5-way** 🔘 to access **Favorites**.
3. Select a blank button.
4. Select the **Types** pick list and select **Call Log**, **Dial Pad**, **Contacts**, **Application**, **Message, Email**, or **Web Link**.
5. Enter a label for the favorite and any other necessary information on the screen.

| **Tip:** | When creating a Message or Email favorite you can enter multiple addresses; simply separate each address with a comma. This is an easy way to send messages to a group of people. |

6. (Optional) Enter a **Quick Key**. (When you are in the **Main**, **Dial Pad**, or **Favorites** view of the Phone application, press and hold the **Quick Key** to instantly open the favorite.)

7. Select **OK**.

Editing or Deleting an Existing Favorite Button

You can edit or delete most favorite buttons. Note that you cannot edit or delete the preset voicemail button, but you can add Extra Digits or move the voicemail button to a different position.

1. Press **Phone/Send** 📞.

2. Use the **5-way** ⬭ to access **Favorites**.

3. Highlight the favorite button you want to edit or delete.

4. Open the **menus** ▱.

5. Select **Edit**, and then select **Edit Favorites Button**.

6. Make the desired changes. (For example, add a **Quick Key** shortcut to any favorite. When you are in the **Main**, **Dial Pad**, or **Favorites** view of the Phone application, press and hold the **Quick Key** to instantly open the favorite.

7. To delete the entry, select **Delete**.

8. Select **OK**.

| **Tip:** | You can also organize your favorite buttons on different pages. Open the **Edit** menu, and then select **Edit Favorites Pages**. To scroll through your Favorites pages, repeatedly press **Right** to see the next page and **Left** to see the previous page. |

Using a Phone Headset

You can connect a phone headset for hands-free operation. If you need to use your device while driving and this is permitted in your area, we recommend using a phone headset (sold separately).
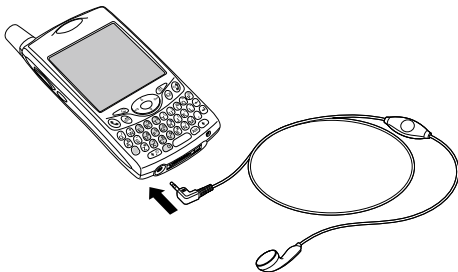
You can press the headset button to perform any of the following tasks:

- Answer an incoming call or a call-waiting call.
- Switch between two active calls (if the second call was incoming).
- Join two calls in a 3-way conference (if the second call was outgoing).
- Transfer an outgoing call to a compatible headset enabled with Bluetooth wireless technology (headset with Bluetooth wireless technology required, sold separately)
- Hang up all calls.

Tip:	If you're using a headset enabled with Bluetooth wireless technology and you want to return to the handset during a call, select **Cancel** on the Active Call screen.

Headset Specifications

Your Treo 650 uses a 2.5 mm, 3-pin headset connector. In addition to the headset that came with your Treo, you can use other third-party headsets that are designed for this type of connector. When in doubt, ask the third-party headset manufacturer if their product is compatible with Treo smart devices. If you hear a headset buzz or poor microphone performance, your headset may be incompatible with Treo 650.

Your Treo 650 is also compatible with headsets enabled with Bluetooth 1.1 wireless technology. This includes most of the headsets currently available with Bluetooth® wireless technology, as many of these headsets support both Bluetooth 1.1 and 1.2 wireless technology. Check the specifications for your headset to confirm compatibility. Please note, however, that you cannot use a headset with Bluetooth wireless technology to listen to MP3 files.

If you want to listen to music through the headset jack in stereo, use a stereo adapter or other accessory.

Visit **www.palm.com** for more information on audio accessories and the most current compatibility information.

Note:	The headset designed for Treo™ 180, 270 and 300 is not compatible with Treo 650. Standard headsets sold with other Sprint phones are compatible with Treo 650.

Connecting to Devices With Bluetooth®
Wireless Technology

With your device's built-in Bluetooth wireless technology, you can connect to a number of devices enabled with Bluetooth wireless technology, such as a headset, car kit, printer, or GPS receiver, as well as to other phones and handhelds with Bluetooth wireless technology. If your computer is enabled with Bluetooth wireless technology, you can also synchronize wirelessly.

Once you set up a connection with a device with Bluetooth wireless technology, you can communicate with that device whenever it is within range (about 30 feet). Be sure to check your battery level before establishing a connection; if the battery level is low, you can't make a Bluetooth wireless connection.

Connecting to Headset or Car Kit With Bluetooth Wireless Technology

1. Go to **Applications** 🔍 and select

   Bluetooth 📶.

2. Select **On**.

3. Enter a **Device Name** for your Treo 650. (This is the name other devices with Bluetooth wireless technology see when they connect to your Treo 650.)

4. Select the **Discoverable** pick list and select one of the following:

- **Yes** automatically establishes connections with devices with which you've created a trusted pair. New devices can request a connection which you can accept or refuse.
- **No** enables devices with which you've already formed a trusted pair to find your device. New devices cannot request a connection.

Note:	Both your device and the **Bluetooth** setting must be **On** for your device to be discoverable.

5. Select **Setup Devices**.

6. Select **Hands-free Setup**.

7. Follow the onscreen instructions to create a trusted pair with the specific device. (In some cases you may need to perform setup steps on the other device before you can complete this step.)

8. After you finish setting up the device, close the Bluetooth application.

Setup Devices ⓘ

Hands-free Setup
Configure a Bluetooth headset or car kit for your Treo.

HotSync Setup
Configure Bluetooth HotSync between your Treo and PC.

Done | Trusted Devices

Tips for Handsfree Devices With Bluetooth Wireless Technology

- If you're using a handsfree device with Bluetooth wireless technology, the Treo 650 automatically routes all calls to that device. When a call comes in, your Treo 650 rings and the headset beeps. However, even if you pick up the call on your Treo, the call goes to the headset.
- If a headset with Bluetooth wireless technology is paired and within range when you place a call, the call is routed to the headset, not the handset.

- To transfer a call from a headset with Bluetooth wireless technology to your Treo (handset) during a call, select 🎧 from the **Active Call** view.
- To set up advanced features, such as auto-answer and voice tags, go to **Applications** ⬙ and select **Prefs** 🗐. Select **Handsfree**, and then configure the settings. Note that your handsfree device with Bluetooth wireless technology must support voice tags to use that feature.
- Your Treo does not support Bluetooth wireless connections to stereo headsets or keyboards.

Creating Trusted Pairs

After you set up a Bluetooth wireless connection with your computer or other accessory devices, you may want to set up other trusted devices, such as a friend's handheld. When your Treo 650 recognizes a trusted device, it automatically accepts communication, bypassing the discovery and authentication process.

1. Go to **Applications** ⬙ and select **Bluetooth** 🔵.
2. Select **Setup Devices**.
3. Select **Trusted Devices**.
4. Select **Add Device**. (The Discovery icon appears to indicate that the discovery process is active.)
5. Select the device you want to add as a trusted device. (If the device you want to add isn't on the discovery results list, select **Find More** to search again.)
6. Enter the same passkey on your device and the other device.

7. Select if the device is a headset or a car kit and then select **OK**.

Important:	Some devices with Bluetooth wireless technology have a built-in passkey; others let you select the passkey. In either case you must use the same passkey on both the other device and your Treo 650. See the documentation for the device with Bluetooth wireless technology for additional information.

8. Select **Done**.

Note:	Make sure you close the **Bluetooth** application after you set up devices and trusted pairs.

Sending Information Over a Bluetooth Wireless Connection

You can send an individual entry or a category. When you send a category, the items within the category appear as unfiled items on the receiving device.

1. Open an application.

2. Select the entry or category you want to send.

3. Open the **menus** .

4. Select **Send** on the leftmost menu.

5. Select **Bluetooth**, and then select **OK**.

6. Select the receiving device on the **Discovery Results** screen, and then select **OK**.

Sending an Application Over a Bluetooth Wireless Connection

1. Go to **Applications** ⬚.
2. Open the **menus** ⬚.
3. Select **Send** on the **App** menu.
4. Select the **Send From** pick list and select whether the application you want to send is located on your Treo or an expansion card.
5. Select the application you want to transfer. (It cannot have a lock 🔒 next to it.)
6. Select **Send**.
7. Select **Bluetooth**, and then select **OK**.
8. Select the receiving device on the **Discovery Results** screen, and then select **OK**.

Receiving Information Over a Bluetooth Wireless Connection

1. Go to **Applications** ⬚ and select **Bluetooth** ⬚.
2. Select **On**.
3. If you already created a trusted pair with the other device, your Treo 650 is ready to receive the information. If you do not have a trusted pair with the other device, select the **Discoverable** pick list and select **Yes**.
4. When the **Send** dialog box appears, select a category or expansion card.
5. Press **Up** ▲ to receive the information or press **Down** ▼ to refuse it.

Using Dial-up Networking on Your Treo 650

If your computer is enabled with Bluetooth wireless technology, you can use your Treo 650 as a wireless modem to access the Internet from your computer. Dial-up networking (DUN) is the feature that converts your smart device into a wireless modem.

Note:	To use DUN, you must have a data services plan.

To configure DUN, complete the procedures in this section:

- "Creating a Trusted Pair Between Your Treo 650 and Your Computer" on page 82
- "Enable or Install DUN on Your Computer" on page 84
- "Enabling DUN on Your Treo 650" on page 84
- "Accessing the Internet From Your Computer" on page 85

Creating a Trusted Pair Between Your Treo 650 and Your Computer

After creating the trusted pair, you can use your Treo 650 as a modem any time it is within range of your computer, bypassing the discovery and authentication process. You need to do this only once.

1. Make sure that your computer's Bluetooth setting is on and that your computer is discoverable. Check the documentation that came with your computer to find and change these settings.

Tip:	If your computer is not enabled with Bluetooth wireless technology, you may be able to purchase a wireless Bluetooth adapter accessory for your computer.

2. On your Treo 650, go to **Applications** and select **Bluetooth** .
3. Select **On** if it is not selected, and then select **Setup Devices**.
4. Select **Trusted Devices**.
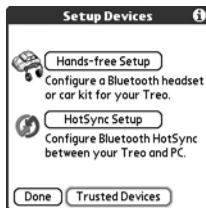
5. Select **Add Device**. The discovery icon appears, indicating that the discovery process is active.
6. Select your computer from the **Trusted Devices** list, and then select **OK**.
7. Enter a passkey on the **Bluetooth Security** screen, and then select **OK**. The passkey can be any number you choose. We recommend that you use at least four digits in your passkey.

8. Enter the same passkey number on your computer when prompted.

9. Select **Done**, and then select **Done** again to return to the **Bluetooth** screen.

Enable or Install DUN on Your Computer

Dial-up networking must be enabled or installed on your computer. Follow the instructions from the manufacturer of your Bluetooth adapter to enable DUN.

Enabling DUN on Your Treo 650

You must enable DUN on your Treo 650 each time you wish to use your device as a wireless modem.

1. Go to **Applications** and select **Bluetooth** .

2. Select the **Dial-up Networking** pick list, and then select **On**. When DUN is successfully enabled, the DUN icon appears.

3. Select **OK** on the warning screen that appears. This screen reminds you to disable DUN when you want to stop the Internet session on your computer.

Note:	When DUN is on, you cannot pair with another device or discover another device. You can also not send or receive information wirelessly directly from your smart device, browse the Web, or send or receive email messages. You can use all the other features of your Treo 650, including the **Phone** application.

Accessing the Internet From Your Computer

The steps for accessing the Internet on your computer may vary depending on your operating system and how Bluetooth wireless technology is set up on your computer—for example, if it is built in versus if you are using a wireless Bluetooth adapter. If the following procedure does not work with your computer, check your computer's documentation for how to set up Bluetooth technology to access the Internet using a DUN connection.

Before you begin, verify that DUN is enabled on both your computer and your Treo 650.

1. Open the **Bluetooth** panel on your computer and look for the option for paired devices. Check your computer's documentation for how to bring up this screen and the name of the paired devices option.

2. Double-click the icon or option representing your Treo 650. Your computer connects to your Treo 650 and shows that DUN services are available.

3. Double-click the DUN service icon.

4. Leave the username and password fields blank. You do not need to enter a separate username and password.

5. Enter the following in the **Dial** field: #777

6. Click **Dial**. Once the connection is successfully established, you can browse the Internet on your computer or download your email.

To verify that you are connected, look for a network connection icon in the task bar at the bottom of your computer screen. To check the status of the connection, right-click the Bluetooth network icon.

Note:	Keeping DUN enabled drains your Treo 650's battery more quickly. Be sure to turn off DUN on your Treo 650 when your Internet session is finished.

Tip:	You may need to use a virtual private network (VPN) to access corporate email. Check with your system administrator for information.

Terminating an Internet Session

To terminate an Internet session, first disconnect from DUN on your computer, and then turn DUN off on your Treo 650.

1. On your computer, right-click the icon or option representing your Treo 650, and then click **Disconnect**.

2. On your Treo 650, go to **Applications** and select **Bluetooth** .

3. Select the **Dial-up Networking** pick list, and then select **Off**. When the Bluetooth status icon reappears at the top of the screen, you have successfully switched off DUN.

Using Your Device's Organizer Features

In This Section

- ♦ **Calendar**
- ♦ **Tasks**
- ♦ **Memos**
- ♦ **Listening to Music**
- ♦ **World Clock**
- ♦ **Calculator**
- ♦ **Looking Up Contacts and Other Information**
- ♦ **Beaming Information**

Organizer Features

Calendar

Calendar is a powerful organizer application that helps you manage your schedule.

Displaying Your Calendar

Do any of the following:

- Press the **Calendar** ⊛ button repeatedly to cycle through the various views:

    - **Agenda View** shows your daily schedule and any items on your Tasks list that are overdue or due today. If there's room, **Agenda** view also shows your schedule for the next dates that have events scheduled.
    - **Day View** shows your daily schedule one day at a time.
    - **Week View** shows your schedule for an entire week. The timeframes are based on the **Start Time** and **End Time** settings in **Calendar Preferences**.
    - **Month View** shows your schedule for a whole month.

- From any **Calendar** view, open the **Options** menu and select **Year View** to view a calendar for an entire year.

- From **Day** view, **Week** view, **Month** view, or **Year** view use the **5-way navigator** ◎ to move to another day, week, month, or year (based on the current view).

- From **Day** view, **Week** view, **Month** view, or **Year** view select **Go To**, and then select a date from the calendar.

Tip:	You can customize your phone to display the most current **Calendar** event on the **Main** view in the **Phone** application. Press **Phone/Send**, open the **Options** menu, and then select **General Preferences**. Check the **Show Calendar** event box.

Creating an Event

You can enter events on your device. However, if you have several appointments to enter, it's more efficient to use Palm® Desktop software or Microsoft Outlook on your computer and then synchronize information between your Treo 650 and your computer. (For more information, see "Synchronizing Contacts and Other Information" on page 124.)

1. Press **Calendar** (⊛) until you are in **Day** view.
2. Press **Left** ◀ and **Right** ▶ to select the desired day.
3. Using the keyboard, enter a starting hour for the event. (For example, enter 5 for 5:00. Remember to press **Option** (◉) before entering numbers.)
4. Select the starting minute for the event.
5. Select the **End Time** box, and then select the ending hour for the event.
6. (Optional) Select the **Time Zone** pick list and select a time zone.
7. Select **OK**.
8. Enter a description for the event.

Organizer Features

Selected date

Start and end times

Selected day
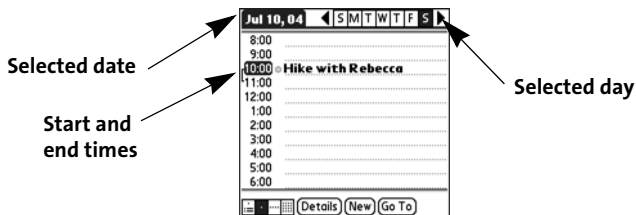
Important:	If you use Palm Desktop software, do not add time zones to your events. Palm Desktop does not support time zones. If you use Microsoft Outlook, you can use the time zone feature, but you must install the conduit that came with your Treo 650 (or a subsequent update) on all the computers you synchronize your device with. Chapura PocketMirror and other earlier Microsoft Outlook conduits do not support time zones.

Tip:	To automatically assign a time zone to your events, open the **Options** menu, select **Preferences**, and check the **New events use time zones** box. All your new events will be assigned to your local time zone, and you can change this setting for individual events. If you sync with Outlook and you select the time zone option on the Contacts conduit sync screen, then time zones will sync for any new events you create in Outlook. Time zone settings are not added to any events that you created before you set these time zone settings.

Adding an Alarm to an Event

1. In **Calendar**, select the event.

2. Select **Details**.

Number of time units

Event Details

Time: 10:00 am - 11:00 am
Date: Sat 7/10/04
Alarm: ☑ 30 ▼ Minutes
Location: Fall Creek
Category: ▼ Unfiled
Repeat: ▼ None
Private: ☐

(OK) (Cancel) (Delete...) 📄 ●

Type of time units

3. Check the **Alarm** box, and then select the number of minutes, hours, or days before the event you would like to receive the alarm.

Note:	The alarm for untimed events (see "Creating an Untimed Event" on page 91) is defined by minutes, days, or hours before midnight of the date of the event.

4. Select **OK**.

When an alert occurs, the **Alert** screen displays all your pending alerts. Select an item's description to jump to that item, or check the box to clear that item.

Creating an Untimed Event

An untimed event, such as a holiday or anniversary, does not occur at a particular time.

1. Press **Calendar** ⊙ until you are in **Day** view.
2. Press **Left** ◀ and **Right** ▶ to go to the date of the event.
3. Make sure nothing is highlighted.
4. Enter a description for the event.

Diamond indicates an untimed event
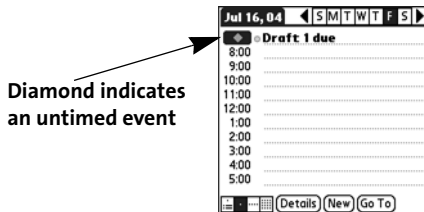
Scheduling a Repeating Event

1. Create an event, and then select it.
2. Select **Details**.
3. Select the **Repeat** pick list and select a repeat interval. (If the interval you need doesn't appear on the list, select **Other** to define a custom interval.)
4. Select **OK**.

Tip:	To enter a birthday, add the date to the person's Contacts entry. To enter an anniversary, create an untimed event. Then, from the **Details** screen, select **Year** as the repeat interval.
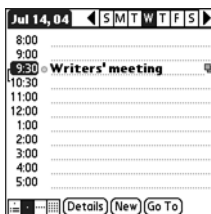
This icon indicates a repeating event

Color-Coding Your Schedule

Use color-coding to quickly spot different types of events. For example, make your appointments with family green, work blue, and friends yellow.

1. From **Day** view, select the event description.
2. Select **Details**.
3. Select the **Category** pick list and select **Edit Categories**.
4. Select **New,** or select a category and then select **Edit**.
5. Enter the category name.
6. Select the color you want to give this category.
7. Select **OK**, and then select **OK** two more times.

You can now assign an event to this category. See the next section for details.

Editing or Deleting an Event

1. Select the event you want to change or delete.
2. Select **Details**.

Tip:	To save memory, you can purge your old events. Open the **Record** menu and select **Purge**. Select the **Delete events older than** pick list and select a timeframe. Select **OK**.

3. In addition to the settings covered earlier in this chapter, you can also change any of the following settings:

   - **Date** and **Time** displays when the event takes place. Change these settings to reschedule the event.
   - **Location** provides space for you to enter a description of where the event takes place.
   - **Category** sets the color-coded category for this event.
   - **Note** ▣ provides space for you to enter additional text.
   - **Delete** removes the event from your calendar.

4. Select **OK**.

Tip:	If you synchronize with Microsoft Outlook and your events include other people, a **With** field appears in the **Details** dialog box and your attendee information appears in this field after you synchronize.

Customizing Display Options for Your Calendar

1. Open the **menus** ✆.
2. Select **Options**, and then select **Display Options**.
3. Select the **Default View** pick list and select the view you want to see when you open **Calendar**.

4. Select the **Agenda** box and set any of the following **Agenda** view options:

- **Default View** sets which view appears when you open **Calendar**.

- **Show Due Tasks** displays tasks that are due today and tasks that are overdue.

- **Show Messages** displays the number of read and unread email messages.

- **Background** displays a favorite picture as the **Agenda** view background. Check the **Background** box, select the picture thumbnail, and then select a picture. Adjust the fade setting so that the text is easy to read against the picture.

5. Select the **Day** box and set any of the following **Day** view options:

- **Show Category List** displays the category pick list.

- **Default View** sets which view appears when you open **Calendar**.

- **Show Time Bars** activates the time bars that appear in the **Day** view. The time bars show the duration of an event and illustrate event conflicts.

- **Compress Day View** controls how times appear in the **Day** view. When **Compress Day View** is off, all time slots display. When it is on, start and end times display for each event, but blank time slots toward the bottom of the screen disappear to minimize scrolling.
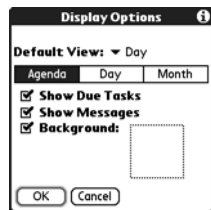
- **Show Category Column** displays the color-coded category marker between the time and description to indicate which category the event is filed under.

6. Select the **Month** box and set any of the following **Month** view options:

   - **Show Category List** displays the category pick list.

   - **Default View** sets which view appears when you open **Calendar**.

   - **Timed Events** displays events that are scheduled for a specific time.

   - **Untimed Events** displays events that are scheduled for a specific date, but not a specific time.

   - **Daily Repeating Events** displays events that repeat every day.

7. Select **OK**.

Note:	If you use Microsoft Exchange ActiveSync®, your email and calendar information synchronize directly with your company's Exchange server.
	You must retrieve email and calendar updates from the VersaMail® application, they do not update when you synchronize with your computer. See "Working With Microsoft Exchange ActiveSync®" on page 204. Your contacts, tasks, and memos synchronize with Palm Desktop software or Microsoft Outlook, depending on which desktop application you use.

Selecting Alarm Tones

1. Press **Calendar** ⊛ until you are in **Day** view.

2. Open the **menus** ✎.

3. Select **Options**, and then select **Sound Preferences**.

4. Select the **Volume** box.

5. Select each pick list and select an **Alert Volume** and **Vibrate** setting.

6. Select the **Tones** box.

7. Select tones from any of the following pick lists:

   ▪ **Alarm Sound** sets the tone played the first time your alarm goes off.

   ▪ **Reminder Sound** sets the tone played if an alarm is not acknowledged and the alarm repeats itself.

   ▪ **Play Sound** determines how many times an alert tone plays during the alarm sequence.

   ▪ **Repeat Alarm** determines how many times the alarm repeats itself if not acknowledged.

   ▪ **Every** sets the interval between alarm repeats if the alarm is not acknowledged.

   ▪ **Alarm Preset** sets the default number of minutes, hours, or days before an event that the alarm goes off.

8. Select **Done.**

Organizer Features
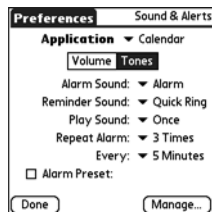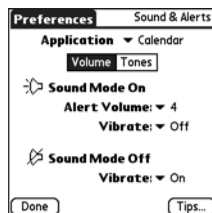
Tip:	You can also preview, delete, and send sounds on your device. From the **Sounds & Alerts** screen, select **Tones**, and then select **Manage**. To play a sound, select it and press **Center**. To delete a sound, select it and press **Backspace**, and to send a sound, select it, and then select **Send**.

Tasks

You can use **Tasks** as a reminder of tasks you need to complete and to keep a record of complete tasks. You can also display your tasks in your calendar. See "Customizing Display Options for Your Calendar" on page 94 for details.

Adding a Task

1. Go to **Applications** ✎ and select **Tasks** 🐾.

2. Select **New** to create a new task.

3. Enter a description of the task. (The text can be longer than one line.)
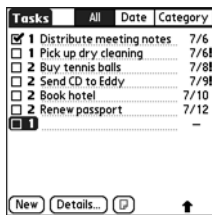
Checking Off a Task

You can set **Tasks** to record the date that you completed the task, and you can select to show or hide completed tasks. Completed tasks remain in the memory of your device until you purge them.

● Select the task you want to check off, and then press **Center**.
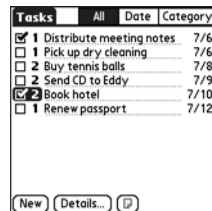
Setting Task Priority, Due Date, and Other Details

The **Details** dialog box enables you to assign a priority level, due date, category, privacy flag, and note to each task.

1. Select the task to which you want to assign details.

2. Select **Details**.

3. Set any of the following:

   ▪ **Priority** sets the Priority number for this task (1 is most important). You can arrange your tasks later based on their importance.

   ▪ **Category** assigns the task to a specific category.

   ▪ **Due Date** sets the due date for the task. Select the **Due Date** pick list and select a due date.

   ▪ **Alarm** enables you to set an alarm for a task with a due date.

   ▪ **Repeat** indicates whether the task occurs at regular intervals and how often it repeats. This option is available only for tasks with due dates.

   ▪ **Private** indicates whether the task is private. Check this box to mark this task private.

   ▪ **Note** stores additional text you want to associate with the task.

4. Select **OK**.

| **Tip:** | You can also set the priority by tapping the **Priority** number next to a task and then selecting a priority level from the list. |

Organizing Your Tasks

In the Tasks list, select one of these options:

● **All** displays all your tasks.
● **Date** displays tasks that are due in a specific time frame. Select the pick list in the upper-right to select **Due Today**, **Last 7 Days**, **Next 7 Days**, or **Past Due**.

- **Category** displays tasks that are assigned to the selected category. Select the pick list in the upper-right to select a different category.

Deleting a Task

1. Select the task you want to delete.
2. Open the **menus** ✏️.
3. Select **Delete Task** on the **Record** menu.
4. Select **OK**.

Tip: To save memory, you can purge all completed tasks. Open the **Record** menu, select **Purge**, and then select **OK**.

Customizing Tasks

The **Preferences** dialog box enables you to control the appearance of the **Tasks** list screen.

1. In the **Tasks** list screen, open the **menus** ✏️.
2. Select **Options**, and then select **Preferences**.
3. Set any of the following preferences:

   - **Sort by** indicates the order in which your tasks appear in the list.
   - **Show Completed Items** displays tasks that you checked off.
   - **Record Completion Date** replaces due date with the completion date when you complete (check) the task.
   - **Show Due Dates** displays task due dates and inserts an exclamation point (!) next to overdue tasks. Turning on this option also enables you to select the due date in the **Tasks** list to pick a new date.
   - **Show Priorities** displays the priority setting for each task.
   - **Show Categories** displays the category for each task.
   - **Alarm Sound** sets the sound for the alarms you assign to your tasks.
4. Select **OK**.

Memos

Memos are a great way to store notes on your Treo. Each memo can include 4,096 characters of text.

Creating a Memo

1. Go to **Applications** and select **Memos**.

2. Enter the text you want to appear in the memo.

   (Press **Return** to move down to new lines in the memo.)

3. Select **Done**.

Tip:	You can assign categories to your memos. Open the memo you want to change, select the category pick list at the top of the screen and select a category.

Deleting a Memo

1. Select the memo you want to delete.

2. Open the **menus**.

3. Select **Delete Item** on the **Record** menu.

4. Select **OK**.

Organizer Features

Listening to Music

You can listen to music through the speaker on the back of your device, or through a stereo headphone (stereo headphone adapter or 2.5mm stereo headphone required, sold separately).

Transferring MP3 Files From Your Computer

The RealPlayer® software that comes with your device is compatible with the popular MP3 audio file format as well as the RealAudio® RA, RM, and RMJ file formats. If your songs are already on your computer's hard drive in one of these formats, you can use palmOne™ Quick Install to transfer your songs to an expansion card (sold separately).

If your songs are on a CD and you want to listen to them on your device, you can use the RealPlayer® desktop software on your Windows computer to convert and transfer the files to an expansion card. See the RealPlayer online Help for details. You can install the RealPlayer desktop software from the **Software Essentials** section on the Software Installation CD that came with your Treo.

If you want to download songs from the Real® Music Store (additional fees may apply), you need to download and install a special version of RealPlayer for Palm that is compatible with Real Music Store files. To download this special version, visit www.real.com.

| **Important:** | You must use an expansion card (sold separately) to listen to music on your device. You cannot store music in your device's internal memory. |

To download songs from your computer to your Treo 650:

1. Connect your Treo 650 to your computer with the USB sync cable.

2. Insert an expansion card into your Treo 650.

3. Do one of the following:

    - **Windows.** Drag and drop the file(s) or folder onto the **palmOne Quick Install** icon on the Windows desktop.

    - **Mac.** Drag and drop the MP3 files onto the **Send To Device** droplet in the **Palm** folder.

4. Select your **Username**, the **File** name, and the **Destination** (card).

5. Click **OK**.

6. Synchronize your Treo 650 with your computer. (Be patient; transferring music to an expansion card can take several minutes.)

Tip:	You can also use a card reader accessory (sold separately) to transfer MP3 files from your computer to your expansion card. Create an "SD_Audio" folder in the root directory of the card, and store your MP3 files in this folder.

Transferring Music From a CD to Your Treo 650

Mac users: Use iTunes (included with OS X) to convert music from a CD to MP3 format. You can then follow the steps above to transfer the MP3 files onto your device. For details on using the iTunes software, see the documentation that came with your Mac.

Windows users: To transfer music from a CD to your device, you must first install the RealPlayer desktop application onto your Windows computer. You must install this software from the Software Installation CD that came with your Treo 650 even if you already have a version of RealPlayer installed on your computer. After you install the software, follow these steps to transfer music to your device.

To transfer music from a CD to your Treo 650:

1. Double-click the **RealPlayer** icon 🎵 on your computer desktop.

2. Insert the CD into your computer's CD drive. (If the track list doesn't appear, click **Music & My Library**, and then click **CD/DVD** in the **View** menu.)

3. Click **Save Tracks,** and follow the onscreen instructions to select and copy tracks.
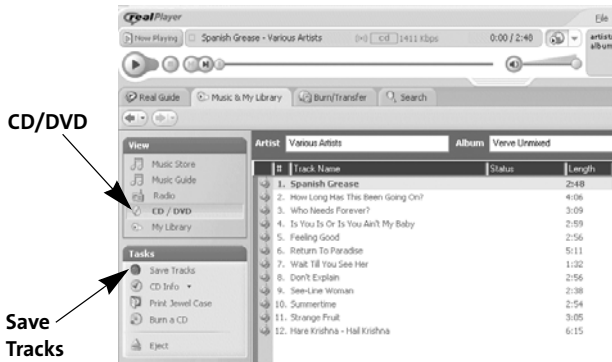
4. Go to **Applications** and select **RealPlayer** .

5. Connect your device and your computer to the USB sync cable.

6. In RealPlayer on your computer, click **Burn/Transfer**.

7. If necessary, select **palmOne Handheld** from the **Current Burn/Transfer Device** list.

8. Drag the song files you want from the **My Library** window on the left into the **palmOne Handheld** window on the right.

9. Be sure your device is on and that **RealPlayer** is open. (A green Connected light appears in the lower-left corner of RealPlayer on your computer if it is.)

10. Click **Start Transfer**. (When the transfer is complete, the tracks you selected should say "On Device.")

Important:	Do not press the HotSync button on your cable. RealPlayer transfers the files, so there's no need to do anything.

Listening to Music on Your Treo 650

1. Go to **Applications** ⌨ and select **RealPlayer** ①.

2. Do any of the following:

   ▪ To play (or pause) the current song, press **Center** or the **Side** button.

   ▪ To play the next song, press **Right** ▶.

   ▪ To play the previous song, press **Left** ◀.

   ▪ To play a different song, use the stylus to select **Songs** and select a song from the list.

   ▪ To select random or continuous playback, use the stylus to select the onscreen controls.

   ▪ To adjust the volume during playback, press the volume button.

Progress indicator

Continuous play

Random play

Tip:	You can customize your Treo 650 so that pressing and holding the **Side** button on the side of your Treo 650 opens **RealPlayer**. See "Button Settings" on page 151 for details.

RealPlayer continues playing until it reaches the end of your list, until you select **Stop,** or until you turn off your device. Music continues to play even if you switch to another application or turn off your screen. Remember to stop the music if you switch to another audio application, such as recording a voice memo. If you want to stop playing music when you exit RealPlayer, open the **Options** menu and select **Preferences**. Uncheck the **Enable Background Playback** box, and then select **OK**.

Tip:	To view details for the song that is playing, open the **Music** menu and select **Song Details**.

Creating a Playlist

1. Select **Playlists**.

2. Select **New**.

3. Enter a **Name** for the playlist.

4. Select **Add**.

5. Check the box next to the songs you want to include on the playlist.

6. Select **Done**, and then select **Done** again.

To play songs from a playlist, select **Playlists**, select the playlist you want to play, and then select the first song you want to hear on that list.

Editing a Playlist

1. Select **Playlists**.

2. Select the playlist you want to edit, and then select **Edit**.

3. Do any of the following:
   - To delete a song from the playlist, select the song, and then select **Remove**.
   - To add a song, select **Add**, check a song's box, and then select **Done**.
   - To move a song up or down one slot, select a song, and then select the up or down arrow.
4. Select **Done**, and then select **Done** two more times.

Tip:	To delete a playlist, select **Playlists**, select the playlist, and then select **Delete**.

World Clock

World Clock displays the day and time in your home city and in two other cities around the globe. Whether you're travelling or at home, it's easy to keep track of the best time to reach your business associates, friends, and family in far away places.

Setting Your Home City

The home city serves as a point of reference for your other city selections. The home city time reflects the current system time. The information displayed for the other cities is based on the day and time in your home city.

Home city

1. Go to **Applications** ✎ and select **World Clock** 🕐 .

2. Select the **City** pick list at the top of the screen and select the city closest to your location (in the same time zone).

Tip:	If the **Enable Local Network Time** box is checked in your **Date & Time Preferences**, the Nationwide Sprint PCS Network automatically sets the time and updates it when you travel.

Selecting Remote Cities

In addition to your home city, you can display the day and time for two other cities anywhere around the globe. These other cities are called remote cities.

► Select a pick list in the lower part of the **World Clock** screen, and then select the city closest to the city you want to display.

Adding Cities

If the city you want to display is not in the predefined list, you can use the **Edit Cities** command to add it.

1. Select a city pick list and select **Edit Cities**.
2. Select **New**.
3. Enter the city name and other information.
4. Select **OK**.

Setting an Alarm

1. Select **Off** in the upper-right corner.
2. Select the time you want the alarm to sound.
3. Select **OK**.

Tip:	To customize the alarm **Sound** and **Volume**, open the **Options** menu and select **Alarm Preferences**.

World Clock Tips

- World Clock does not automatically update the system time for Daylight Savings Time (DST).
- Run your stylus over the map to see the time in other cities.
- The shadow over the map represents nighttime moving across the globe.

Organizer Features

Calculator

Your Treo 650 includes a basic calculator, plus an advanced calculator with scientific, financial, and conversion functions. You can tap the screen or use the keyboard to input numbers.

Switching Between Basic and Advanced Calculator Modes

1. Go to **Applications** ⌖ and select **Calculator** 🔢.
2. Open the **menus** ✉.
3. Select **Options**, and then select **Advanced Mode** or **Basic Mode**.
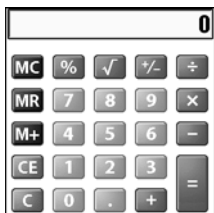
Basic Mode
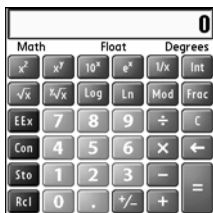
Advanced Mode

Tip:	In Basic Mode, you can also press **Right** to switch to Advanced Mode. In Advanced Mode, pressing **Right** cycles between functions, and pressing **Left** returns you to Basic Mode.

Selecting Functions in Advanced Calculator Mode

1. Switch to **Advanced Calculator** mode (see above).

2. Open the **menus** ✉.

3. Select **Options**, and then select the function you want to use:
   - **Math** provides advanced mathematical functions, such as exponents, roots, and logarithms.
   - **Trig** provides trigonometric functions, such as sine, cosine, tangent, and variants.
   - **Finance** provides financial calculator functions, such as APR and amortization.
   - **Logic** displays hexadecimal characters in the keypad, plus logic functions such as and, not, or, and xor. In place of Float/Degrees (see below), this view includes options for class (bin, oct, SDec, UDec, hex) and bits (8, 16, 32).
   - **Statistics** provides statistical functions, such as sum, factorial, and random number generator.
   - **Weight/Temp** provides weight and temperature conversions for metric and English values.
   - **Length** provides length conversions for metric and English values.
   - **Area** provides area conversions for metric, traditional, and English values.
   - **Volume** provides volume conversions for metric and English values.

4. Enter an integer for the number of decimal places to display.

5. Open the **menus** ✉.

Organizer Features

6. Select **Pref**, and then select the decimal display format: **Float**, **Fixed x)**, **Sci (x)**, or **Eng (x).**

7. Open the **menus** ✎.

8. Select **Pref**, and then select the number display format: **Degrees**, **Radians**, or **Grads**.

Tip:	To access a list of mathematical constants, such as Avogadro's number or the speed of light, select **Con**.

Storing and Recalling Numbers in Advanced Mode

▶ To store a number in one of ten memory slots, select **Sto**.

▶ To recall a stored number, select **Rcl**.

Looking Up Contacts and Other Information

With the built-in search features on your Treo 650, you can find information quickly.

- **Lookup** enables you to dial your Contacts by name. It locates people's phone numbers when you're in the Phone or messaging applications.
- **Find** searches through the text in all the applications on your Treo 650, always starting with the current application.

Lookup

You can quickly locate Contacts by entering just a few letters of a Contact's name.

1. Press **Phone/Send** 📞.
2. Select the **Contacts** favorite button.
3. Enter the first few letters of the contact you want to find. You can enter:
    - First name (JOH for John) or
    - Last name (SMI for Smith) or
    - First name initial and last name (JSM for John Smith)

    For example, entering SM displays Smilla Anderson, John Smith, and Sally Martin as shown above. Entering JSM finds only John Smith.

Organizer Features

Note:	If typing the first few letters does not initiate a search, go to **Applications**, select **Contacts**, and then try step 2 again. To set your Treo 650 to search from the **Main** view of the Phone application, go to that view, open the **Options** menu, and then select **General Preferences**. Next, select the second pick list and select **Typing starts contacts search**.

4. Do one of the following:

   - Highlight the contact name, and then press **Center** to view the contents of the entry.

   - Highlight any phone number, and then press **Phone/Send** 🕾 to dial.

Tip:	To look up names from other applications, select the **Lookup** button if it appears.

Using Find

The **Find** feature locates any text in the built-in applications and databases, and in some third-party applications. The **Find** feature performs an exact search on a character string, including characters that are parts of words. **Find** is not case-sensitive and it locates any word that begins with the text you enter. For example, entering "plan" finds "planet," but not "airplane."

Find
Matches for "birthday"
── Calendar ──
Mom's Birthday — Yearly
Ed's birthday — Yearly
Carolyn's Birthday — Yearly
Karen Hwa's Birthday — Yearly
Dad's Birthday — Yearly
Yuko's Birthday — Yearly
Naoko's Birthday — Yearly
Yukari's Birthday — Yearly
(Cancel) (Find More)

1. Press **Option** ⓞ, and then press **Shift/Find** ⬥⌕ to open the **Find** dialog box.

2. Enter the text you want to find.
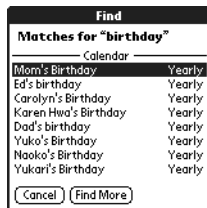
3. Select **OK** to start the search.

4. In the search results, select the text you want to review, or select **Find More** to search additional applications.

| Tip:	To search by company for a person's name you can't remember, open **Find**, and enter the name of the company.

Beaming Information

Your Treo 650 is equipped with an IR (infrared) port that lets you beam information to another Palm Powered™ device with an IR port. The IR port is located on the top of your Treo 650, between the ringer switch and the antenna, behind the small dark shield.

IR port
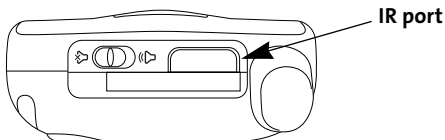
For best results, the path between the two devices must be clear of obstacles, and both devices kept stationary. If you have difficulty beaming, shorten the distance and avoid bright sunlight.

Tip:	If you beam a bookmark or a saved page from the Web browser, it beams the URL, not the contents of that page.

Beaming an Entry

1. Select the entry or category you want to beam. (If a lock 🔒 appears next to the item, it can't be beamed.)

2. Open the **menus** 🗇.

3. Select one of the following on the **Record** menu:

   - **Beam** sends an individual entry.

> ▪ **Beam Category** sends all entries in the current category.

4. When the **Beam Status** dialog box appears, point the IR port on your Treo 650 directly at the IR port of the receiving device.
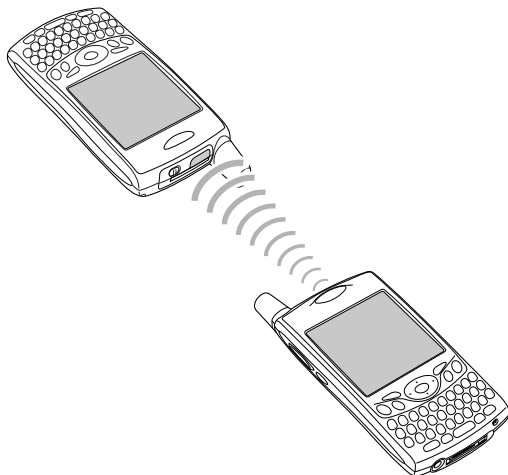
5. Wait for the **Beam Status** dialog box to indicate that the transfer is complete before you continue using your Treo.

Tip:	Beam your business card. From the **Main Phone** view, open the **menus**, and then press **M**.

Beaming an Application

Not all applications can be beamed. A lock icon 🔒 appears on the **Beam** screen next to applications that cannot be beamed.

1. Go to **Applications** ⌂.
2. Open the **menus** ▦.
3. Select **Beam** on the **App** menu.
4. Select the **Beam From** pick list and select whether the application you want to beam is located on your Treo 650 or an expansion card.
5. Select the application you want to transfer, and then select **Beam**.
6. When the **Beam Status** dialog box appears, point the IR port on your Treo 650 directly at the IR port of the receiving device.
7. Wait for the **Beam Status** dialog box to indicate that the transfer is complete before you continue using your Treo 650.

Receiving Beamed Information

You can store beamed entries and applications on your device, or send them to an expansion card inserted in the expansion slot.

1. Turn on your screen.
2. Point the IR port on your Treo 650 directly at the IR port of the transmitting device to open the **Beam Status** dialog box.
3. When the **Beam** dialog box appears, select a category or expansion card. (If you don't select a category, the item goes in the Unfiled category.)
4. Press **Up** ▲ to receive the beam or press **Down** ▼ to refuse it.

Managing Applications

In This Section

♦ **Synchronizing Contacts and Other Information**

♦ **Installing Applications**

♦ **Removing Applications**

♦ **Viewing Application Information**

♦ **Using Expansion Cards**

Synchronizing Contacts and Other Information

Synchronizing means that information that is entered or updated in one place (your device or your computer) is automatically updated in the other. No need to enter information twice.

We strongly recommend that you synchronize your Treo 650 and computer frequently to keep your information up-to-date (and backed up) in both locations.

Before you can synchronize your contacts and other personal information, you must install the software from the Software Installation CD that came with your Treo 650. See "Installing the Synchronization Software on Your Computer" on page 24 for instructions.

If you use the default settings, information from all the following applications is transferred each time you synchronize your device with your computer:

Calendar   Contacts   Memos   Pics&Videos   Tasks   VersaMail

If you choose to synchronize with Outlook, information from Contacts, Calendar, Tasks, and Memos is synchronized with Outlook. You can also set up the VersaMail® application to synchronize with Outlook. Other info, such as photos, is synchronized with Palm® Desktop software.

1. Connect your Treo 650 to your computer as described in "Connecting Your Treo 650 to Your Computer" on page 22.

2. Press the HotSync® button on the USB sync cable.

HotSync Button
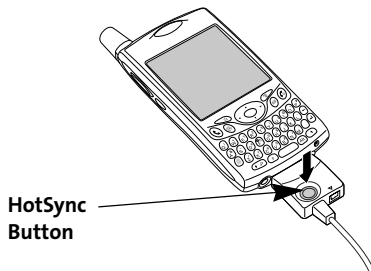
3. Wait for your Treo 650 to display a message indicating that the process is complete.
   - If nothing happens, make sure that you installed the synchronization software and that it is running on your computer. If you installed Palm Desktop software, the HotSync Manager ⊘ icon should appear in the lower-right corner of your computer screen.
   - If you want to synchronize information with applications other than Palm Desktop or Microsoft Outlook, you need to purchase additional third-party conduit software.
   - If you have any problems synchronizing, see "Synchronization (HotSync®)" on page 269 for troubleshooting suggestions.

Applications

Note:	If you use Microsoft Exchange ActiveSync®, your email and calendar information synchronize directly with your company's Exchange server. You must retrieve email and calendar updates from the VersaMail application, they do not update when you synchronize with your computer. See "Working With Microsoft Exchange ActiveSync®" on page 204. Your contacts, tasks, and memos synchronize with Palm Desktop software or Microsoft Outlook, depending on which desktop application you use.

Installing Applications

Your Treo 650 comes with several applications built-in and ready to use. You can also install any of the bonus software included on the Software Installation CD as well as more than 16,000 third-party Palm OS® applications for use on your Treo 650, such as business software, games, and other applications.

When you download an application to your computer, it is probably in a compressed format, such as a .zip or .sit file. If the file is compressed, you need to use a decompression utility on your computer, such as Winzip or Unstuffit, before you install applications on your Treo.

These instructions tell you how to install basic .prc (Palm OS application) and .pdb (Palm OS database) files onto your Treo. Some Palm OS software uses an automatic installer or wizard to guide you through the process. Consult the documentation that came with the software for details about how to install a particular piece of software. Treo 650 is not compatible with .pqa files.

Before you can install an application from your computer to your Treo 650, you need to install Palm™ Quick Install on your computer (see "Installing the Synchronization Software on Your Computer" on page 24).

Applications

Installing Applications From the Internet

You can install Palm OS applications directly from the Internet, using the Web browser. When you download an application, it automatically installs on your Treo 650. Remember: Palm OS applications have .prc or .pdb at the end of their filenames.

1. Open the **Web** browser (see "Browsing the Web" on page 221).

2. Go to the page that contains the link to the application you want to download.

3. Press **Left ◀** or **Right ▶** to highlight the link to the file, and then press **Center** to initiate the download process.

Installing Applications From a Windows Computer

To install applications from a Windows computer, you must first install Palm Desktop software from the Software Installation CD that came with your Treo 650. After you install this software, follow these steps to install applications:

1. Drag and drop the application file(s) onto the **Palm™ Quick Install** icon on the Windows desktop.

2. Select your **username** from the list, and then click **OK**.

3. Synchronize your device with your computer to install the application(s) on your Treo 650.

Installing Applications From a Mac Computer

1. Drag and drop the application files onto the **Send To Device** droplet in the **Palm** folder.

2. Select your username from the list, and then click **OK**.

3. Synchronize your device with your computer to install the application(s) on your Treo 650.

Getting Help With Third-Party Applications

If you encounter a problem with a third-party application (such as an error message), contact the application's author or vendor. For general troubleshooting of third-party applications, see "Third-Party Applications" on page 280.

Applications
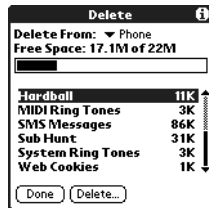
Removing Applications

If you decide that you no longer need an application or you want to free up memory on your Treo 650, you can remove applications from your Treo device or an expansion card. You can remove only applications, patches, and extensions that you install; you cannot remove the built-in applications that reside in the ROM portion of your Treo 650. These applications appear with a lock icon 🔒 next to them.

Applications deleted from your device are kept on your computer in the Archive folder of your user folder.

Note: If you want to remove an application from an expansion card, insert the card into your Treo 650.

1. Go to **Applications** 🔍.

2. Open the **menus** ▤.

3. Select **Options**, and then select **Delete**.

4. If you want to remove an application from an expansion card, insert the card into your Treo 650.

5. Select the **Delete From** pick list and select whether you want to remove the application from your device or an expansion card.

6. Select the application that you want to remove.

7. Select **Delete**.

8. Synchronize your device with your computer to remove the application from the **Backup** folder on your computer.

### Manually Deleting Applications From Your Computer

If an application you delete re-appears on your device, you may need to manually delete it from your computer.

1. Locate your **Backup** folder on your computer.
   - **Windows:** C:\Program Files\Palm\username.
   - **Mac:** Mac HD\Applications\Palm\Users\username.
   - If you upgraded from a previous version of Palm Desktop, your backup folder may be located in the Palm or Handspring folder.

2. If you find a .prc or .pdb file for the application you just removed, delete the file from the **Backup** folder.

3. Delete the file from your Treo 650 again.

Applications

Viewing Application Information

The Info screens display basic statistics about the applications on your Treo 650.

1. Go to **Applications** .
2. Open the **menus** .
3. Select **Info** on the **App** menu.
4. At the bottom of the screen, select the type of information you want to view:
   - **Version** displays the version numbers of applications on your Treo 650.
   - **Size** displays the size (in kilobytes) of applications and information on your Treo 650.
   - **Records** displays the number of entries in different applications on your Treo 650.
5. Select **Done**.
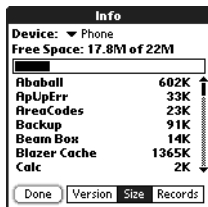
Using Expansion Cards

The expansion slot on your Treo 650 enables you to add Secure Digital (SD) cards and MultiMediaCard cards to extend the storage capacity of your Treo device. Although SD cards are faster than MultiMediaCard cards for reading and writing information, you can use either type of expansion card to store the following:

- **Pictures**
- **MP3 audio files**
- **Email attachments**
- **Games**
- **eBooks**
- **Applications**
- **Databases**
- **... and more**

Your Treo 650 is also compatible with SDIO cards, which let you add accessories, such as a presentation module, to your device.

Although expansion cards are sold separately, your Treo 650 includes a dummy card inside the expansion slot. When you do not have a functioning card inside the expansion slot, reinsert the dummy card to protect the slot opening.

Tip:	Warranty does not cover damage caused by Secure Digital cards which do not meet SD Memory Card Specifications. SD cards which do not meet SD Memory Card Specifications may damage your Treo 650.

Applications

Inserting and Removing Expansion Cards

When you insert an expansion card, the card name appears as a category with a card icon next to the name. To switch between the applications on the expansion card and your device, select the category pick list at the top of the screen and select another category.

1. Press down and release the dummy card.

2. After you feel the expansion slot eject the dummy card, remove the card from the expansion slot.
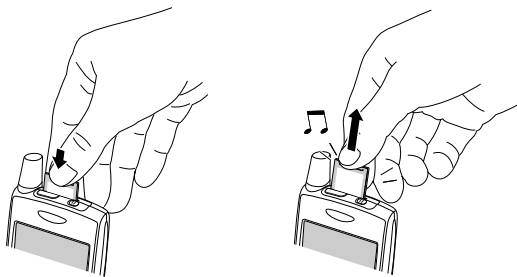
3. Hold your Treo 650 with the screen facing you and the card with the label facing you. (The notch on the card should be in the lower-left next to the antenna.)

4. Insert the card into the expansion slot until you feel the card lock into place and you hear the confirmation tone.


Notch
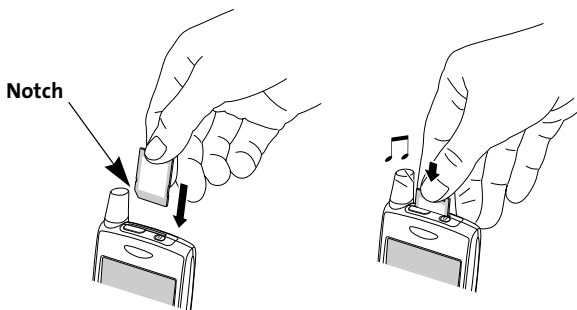
5. When you're done using the expansion card, repeat steps 1 and 2 to remove the expansion card.
6. Reinsert the dummy card to keep the expansion slot clean.

Opening Applications on an Expansion Card

After you insert an expansion card in the expansion slot, you can open any of the applications stored on the expansion card, provided you have enough free space in the internal memory of your Treo 650 to accommodate the program.

1. Insert the expansion card into the expansion slot. (The **Applications** view automatically appears.)

2. Select the icon for the application you want to open.

3. Press **Center** to open the application.
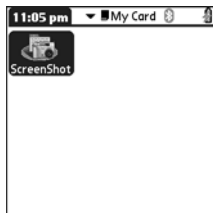
Copying Applications to an Expansion Card

You can copy applications between your Treo 650 and your expansion card.

Note:	Before you copy an application to an expansion card, make sure that the application is compatible with Palm OS version 5.4 or higher. Some applications do not work with expansion cards and do not allow you to store files in a location that is separate from the application.

1. Make sure the card is not write-protected. (See the instructions that came with your card for details.)

2. Go to **Applications** ⌨.

3. Open the **menus** ✉.

4. Select **Copy** on the **App** menu.

5. Select the **Copy To** pick list and select the destination: card name or Phone.

6. Select the **From** pick list and select the location of the application you want to copy: card name or Phone.

7. Highlight the application you want to copy.

8. Select **Copy**.

|	
Tip:	You can install an application directly to an expansion card instead of copying it from your device's main memory. See "Installing Applications" on page 127 for details.

Viewing Expansion Card Information

The Card Info application displays general information about the expansion card that is currently in the expansion slot, and it enables you to rename and format a card.

▶ Go to **Applications** and select **Card Info** .

Renaming an Expansion Card

If you change the contents of an expansion card, you may at some point want to rename the card to better match its contents.
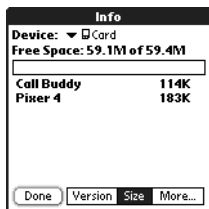
1. Insert the expansion card into the expansion slot. (The **Applications** view automatically appears.)

2. Select **Card Info** 🔵 .

3. Open the **menus** ✐ .

4. Select **Rename Card** on the **Card** menu.

5. Enter a new name for the card.

6. Select **OK**.

Formatting an Expansion Card

Formatting an expansion card is similar to formatting a diskette on a computer. When you format an expansion card, you erase all the information stored on the card and return it to a blank state.

1. Make sure the card is not write-protected. (See the instructions that came with your card for details.)

2. Insert the card into the expansion slot. (The **Applications** view automatically appears.)

3. Select the category pick list at the top of the screen and select **All**.

4. Select the **Card Info** icon 🔵 .

5. Open the **menus** ✐ .

6. Select **Format Card** on the **Card** menu.

7. Enter a new name for the card.

8. Select **OK**.

Customizing Your Device

In This Section

♦ **Phone Settings**

♦ **System Sound Settings**

♦ **Applications Settings**

♦ **Button Settings**

♦ **Date and Time Settings**

♦ **Power Preferences**

♦ **Locking Your Device and Information**

♦ **Additional Features**

♦ **Accessories for Your Device**

Customizing

Phone Settings

Customize the Phone settings on your Treo 650 to match the way you make calls. You can select ring and alert tones, adjust call volume, assign a Caller ID picture to a contact, and even select wallpaper for the Phone application screen, and more.

Selecting Ring and Alert Tones

You can set different tones and volumes for incoming phone calls and alerts.

Tip:	Want more ringtones? Download any compatible ringtone directly to your phone. Go to the **Web** application. From the **Bookmarks** view, select **Software**, and then follow the onscreen instructions. You can also download ringtones to your computer and then email them to your Treo 650.

1. Press the **Phone/Send** 📞 button.

2. Open the **menus** 🗐.

3. Select **Options**, and then select **Sound Preferences**.

4. Select the **Tones** box.

5. Select ringtones and alerts from any of the following pick lists:

   ■ **Known Caller Tone** for an incoming call from someone in your **Contacts** or **Favorites**.

   ■ **Unknown Caller Tone** for an incoming call from someone identified by Caller ID who is not in your **Contacts** or **Favorites**.
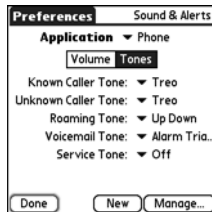
- **Roaming Tone** for incoming calls when you're outside your home mobile network.
- **Voicemail Tone** to alert you of a new voicemail.
- **Service Tone** to warn you of a service change, such as moving into and out of a mobile network coverage area.
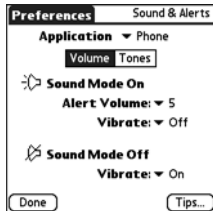
6. Select **Done**.

Tip:	You can also preview, delete, and send sounds on your device. Go to **Applications**, select **Sounds**, select **Tones**, and then select **Manage**. To play a sound, select it, and then press **Center**. To delete a sound, select it, and then press **Backspace**. To send a sound, select it, and then select **Send**.

Selecting Alert Volume and Vibrate Settings

1. Press the **Phone/Send** 📞 button.

2. Open the **menus** ✉.

3. Select **Options**, and then select **Sound Preferences**.

4. Select the **Alert Volume** pick list and select a volume level.

5. Select the first **Vibrate** pick list and indicate whether you want your device to vibrate when you receive a call or alert and the ringer switch is set to **Sound Mode On** 🔔 mode.

Customizing

6. Select the second **Vibrate** pick list and indicate whether you want your device to vibrate when you receive a call or alert and the ringer switch is set to **Sound Mode Off** ⚶ mode.

7. Select **Done**.

Adjusting Volume and Ringtone Settings

● While a call is in progress, while using the personal speakerphone, or while listening to music, press the volume button on the side of your Treo to adjust call or music volume.

● When a call or music are not in progress, press the volume button on the side of your Treo 650 to adjust the ringer volume, and then press **Center** to confirm the change.

● Slide the ringer switch to **Sound Mode Off** ⚶ mode at any time to silence the ringer immediately.

Assigning a Caller ID Picture

1. Press the **Phone/Send** 📞 button.

2. Select the **Contacts** favorite button.

3. Open the contact you want to give a picture Caller ID.

4. Select the **Picture** box.

5. Select **Photos** to add an existing picture to this contact entry, or if your device includes a camera, select **Camera** to take a picture and add it to this contact entry when you save the picture.

6. Select the picture you want to assign to this contact.

7. Select **Done**.

Assigning a Caller ID Ringtone

1. Press **Phone/Send** 📞.

2. Highlight the favorite button you want to give a caller ID ringtone.

3. Open the **menus** ✐.

4. Select **Edit Favorites Button** on the **Record** menu.

5. Select the **Ringtone** pick list and select ringtone for this contact.

6. Select **OK**.

```
┌─────────────────────────────┐
│   Add Favorite            ❶  │
│      Type: ▼ Speed Dial      │
│    Label: Greg    (Lookup)   │
│  Number: 650-555-4276        │
│ Quick Key: G  (press and hold)│
│ Ringtone: ▼ Bells            │
│                              │
│ ( OK )( Cancel )     ( More )│
└─────────────────────────────┘
```

Selecting Wallpaper for the Phone Screen

If you have images stored on your Treo 650 (see "Taking a Picture" on page 234), you can select different wallpaper for the Phone screen.

1. Press **Phone/Send** Ⓒ.

2. Open the **menus** Ⓔ.

3. Select **Options**, and then select **General Preferences**.

4. Select the pick list at the top of the screen and select **Show Wallpaper**.

5. Select the thumbnail image, and then select a Wallpaper image for your Phone screen.

6. Select **OK**.

Note:	If you select the Show Wallpaper option, you can access the Dial Pad by pressing **Phone/Send**, and then selecting **Dial Pad**.

System Sound Settings

You can immediately silence all sounds on your Treo 650, including device ringtones, Calendar alerts, and system sounds. If the ringer switch is set to no sound, the ringer setting overrides the sound settings and all sounds are turned off. This does not, however, mute the earpiece or speakerphone on your Treo 650 during a phone call.

Setting the Ringer Switch

1. Slide the ringer switch to **Sound Mode Off** ⌒.

2. To hear all sounds again, slide the ringer switch to **Sound Mode On** ⌒.

When you slide the ringer switch, it does not affect the software settings for the sounds on your Treo 650. For example, if the Phone ring volume is set to 7, sliding the ringer switch to **Sound Mode Off** ⌒ does not change this setting, but you will not hear the device ring because of the ringer switch position. Your Treo 650 includes a silent alarm that vibrates when the ringer switch is set to **Sound Mode Off** ⌒.
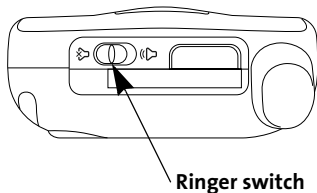
Ringer switch

Setting System Volume Levels

The system volume settings apply only when the ringer switch is set to the on position.

1. Go to **Applications** ⬚ and select **Sounds** ⬚.
2. Select the **Application** pick list and select **General**.
3. Select the **System Volume** and **Game Volume** pick lists and select the volume levels.
4. Select **Done**.

Display and Appearance

Adjusting the Brightness

Depending on the lighting conditions in which you're using your Treo 650, you may need to adjust the brightness of the screen.

1. Press **Option** ⓐ, and then press ⓟ.
2. Press **Left** ◄ and **Right** ► to adjust the brightness.
3. Select **Done**.

Tip:	To automatically set the brightness to the preset low setting, press **Option**, and then press **Right Shift**.

Changing the Screen Font

You can change the screen font in **Calendar**, **Contacts**, **Memos**, **Messaging**, and **Tasks**. The font choices may vary between applications.

1. Open the application in which you want to change the font.
2. Open the **menus** Ⓔ.
3. Select **Options**, and then select **Font**.
4. Select a font style:
5. Select **OK**.

Small   Small   Large   Large
bold   bold

Select Font
Font: A A A A
(OK) (Cancel)
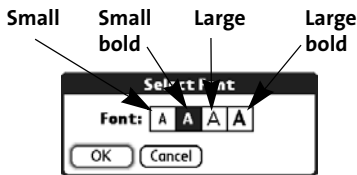
Aligning the Screen

Occasionally, your Treo 650 screen may need to be readjusted. If it is out of alignment, you may see the wrong feature being activated when you tap the screen. To fix the problem, you can realign the screen any time.

1. Go to **Applications** ⊕ and select **Prefs** ⊞.
2. Select **Touchscreen**.
3. Follow the onscreen instructions.
4. Select **Done**.

Changing the System Color Scheme

1. Go to **Applications** ⊕ and select **Prefs** ⊞.
2. Select **Color Theme**.
3. Select a color scheme.
4. Select **Done**.

Applications Settings

You can change the Applications settings on your Treo 650 so that you can easily access the applications you use most often. You can arrange and display your applications by category, reassign the buttons on your Treo device, and select default applications for specific tasks.

Arranging Applications by Category

The category feature enables you to manage the groups of application icons that appear in the **Applications** view. You can assign an application to a category and then display just a specific category or all of your applications.

1. Go to **Applications** ⌂.

2. Open the **menus** ✎.

3. Select **Category** on the **App** menu.

4. Select the pick list next to each application and select a category.

5. Select **Done**.
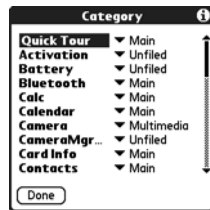
| **Tip:**	To create a new category, select the category pick list and select **Edit Categories**. Select **New**, and then enter the category name. Select **OK** to close the dialog box, and then select **OK** again.

Customizing

Displaying Applications by Category

Do one of the following:

- Press **Applications** $\circledcirc$ repeatedly to cycle through all your categories.
- Select the category pick list at the top of the screen and select the category you want to display.

Selecting the Applications Display

By default, the **Applications** view displays each application as an icon. As an alternative, you can view a list of applications. The list view is particularly useful when you have several applications in a category.
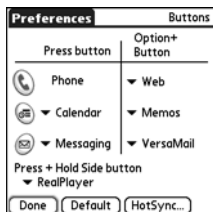
1. Go to **Applications** $\circledcirc$.
2. Open the **menus** $\circledcirc$.
3. Select **Options**, and then select **Preferences**.
4. Select the **View By** pick list and select **List**.
5. Select **OK**.

Button Settings

Buttons Preferences

Buttons Preferences enable you to select which applications are associated with the buttons on the front of your Treo 650 and the HotSync® button on the USB sync cable. You can also change the applications associated with these buttons when they are used in combination with the **Option** ⓞ key.

1. Go to **Applications** ✍ and select **Prefs** 📇.
2. Select **Buttons**.
3. Select the pick list next to the button or key combination you want to re-assign and select the application you want to assign to that button or key combination.
4. Select **Done**.

Tip:	You can also select **HotSync** to pick an application to open with the HotSync button on the sync cable. To restore all of the buttons and key combinations to their factory settings, select **Default**.

Customizing

Setting Default Applications

Sometimes, one application looks for another application to handle information (for example, a mail application might open a browser when you select a link in an email message). **Default Apps Preferences** enable you to designate a specific application as the default handler for a particular type of information. For example, you can select the VersaMail® application as the default Email application.

1. Go to **Applications** ✎ and select **Prefs** 📧.
2. Select **Default Apps**.
3. Select each pick list and select the application you want to associate with that function.
4. Select **Done**.
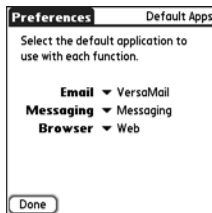
Date and Time Settings

Setting the Date and Time

Date & Time Preferences let you set the time, date, time zone, and daylight savings setting for your Treo 650. By default, your device synchronizes the date and time with the Nationwide Sprint PCS Network when your device is on and you are inside a coverage area.

To manually set the date and time, follow these steps:

1. Go to **Applications** and select **Prefs** .
2. Select **Date & Time**.
3. Uncheck the **Enable Local Network Time** box.
4. Select the **Location** pick list and select a city in your time zone. If there isn't a city on the list, follow these steps to add a city:
   - Select **Edit List**, and then select **Add**.
   - Select a city in your time zone, and then select **OK**.
   - If needed modify the settings in the Edit Location dialog box. and then select **OK**.
5. Select the **Set Date** box. (Highlight the current year, month, and date, and then press **Center**.)
6. Select the **Set Time** box, and then select the current time.
7. Select **Done**.

Customizing
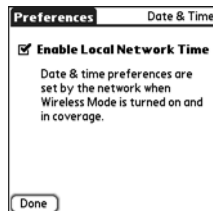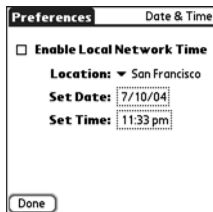
Setting Date and Time Formats

Formats Preferences enable you to select number conventions based on geographic regions. For example, in the United Kingdom, time often is expressed using a 24-hour clock. In the United States, time is expressed using a 12-hour clock with an AM or PM suffix. All the built-in applications on your Treo 650 use the **Format Preferences** settings.

1. Go to **Applications** ⌾ and select **Prefs** ▦.

2. Select **Formats**.

3. Set any of the following preferences:

   - **Preset to** sets the standard number conventions for your country. When you select a country, the other **Formats Preferences** are automatically set to that country's conventions. You can also edit each option individually.

   - **Time** sets the time format. Select HH:MM to display a 24-hour clock.
   - **Date** sets the date format.
   - **Week starts** sets the first day of the week (usually Sunday or Monday) for all applications that include a calendar.
   - **Numbers** sets the format for numbers with decimal points and commas.

4. Select **Done**.

Power Preferences

Power Preferences enable you to set the auto shutoff interval and the beam receive feature for your Treo 650.

1. Go to **Applications** and select **Prefs** .
2. Select **Power**.
3. Set any of the following preferences:
   - **Auto-off After** conserves battery power by automatically turning off your device's screen after the specified time period elapses. It does not turn off your device, so you can still receive calls, email, and messages after the automatic shutoff period.
   - **Beam Receive** sets whether your Treo is enabled to receive beamed information.
4. Select **Done**.

Customizing
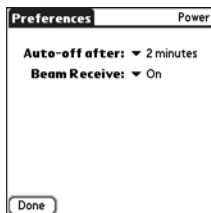
Locking Your Device and Information

Your Treo 650 includes several features that help you protect your device from inadvertent use and keep your information private. The built-in security software enables you to use your Treo 650 for emergency calls, even if the handset is locked.

- **Keyguard** manually disables all buttons and the screen's touch-sensitive feature to prevent accidental presses in your briefcase or pocket.
- **Auto-Keyguard and Touchscreen Lockout** automatically enables **Keyguard** after a period of inactivity, and lets you disable the screen's touch-sensitive feature during an active call or call alert.
- **Phone Lock** prevents phone calls without a password.
- **System Password Lock** prevents anyone from seeing any information on your Treo without a password.
- **Private Records** masks or hides entries marked as private and requires a password to view them.

Keyguard

Your Treo 650 includes a feature that locks the keyboard, so that you don't accidentally press buttons or activate screen items while the device is in a pocket or bag.

1. With the screen on, press **Option** 🔘 and **Power/End** 🔘 to enable **Keyguard**.
2. To disable **Keyguard**, press **Center**.

Auto-Keyguard and Touchscreen Lockout

Auto-Keyguard lets you automatically lock the keyboard after a period of inactivity.

1. Go to **Applications** and select **Prefs** .
2. Select **Keyguard**.
3. Set any of the following preferences:
    - **Auto-Keyguard** sets the period of inactivity that passes before the keyboard automatically locks.
    - **Disable touchscreen when** sets the conditions that disable the screen's touch-sensitive feature.
4. Select **Done**.

Phone Lock

You can lock your device to prevent unauthorized voice and data calls. When your device is locked, you must enter the correct code to unlock it. You can, however, still place emergency calls when your device is locked.

1. Press **Phone/Send** .
2. Open the **menus** .
3. Select **Options**, and then select **Phone Lock**.
4. (Optional) Select **Advanced**, enter up to three numbers (in addition to 911) that you can dial when your device is locked, and then select **OK**.
5. Select one of the following **Lock Phone** options:

- **On phone power off** locks your device each time you turn it off. When this setting is active, you must enter your lock code each time you turn your device on again.
- **Immediately** locks your device when you select **OK**. The next time you turn your device on again you must enter your lock code. After that, you can turn your device on again without entering your lock code.

6. When prompted, enter the lock code, and then select **OK**. (Unless you changed your lock code, the lock code is the last four digits of your phone number.)

7. If you want to change the lock code, select **Change Lock Code**, enter a new **lock code**, and then select **OK**. Repeat this step to verify the new lock code.

8. Based on the option you selected in step 5, do one of the following to lock your device:
   - For **On phone power off**, turn off your device.
   - For **Immediately**, select **OK**.

9. To unlock your device, dial a number, enter your lock code, and then select **OK**.

| Note:	To permanently unlock your device, open the **Options** menu, and then select **Phone Lock**. Uncheck the **On phone power off** box. Your lock code is required to change this setting.

System Password Lock

To protect your personal information, you can lock the system so that you need to enter your password to access any of your information or use other features of your Treo 650.

Important:	If you lock your system, you must enter the exact password to unlock it. If you forget the password, you need to perform a hard reset to resume using your device (see "Hard Reset" on page 259). Performing a hard reset deletes all the entries in your device. However, you can restore all previously synchronized information the next time you synchronize your device with your computer (see "Synchronization (HotSync®)" on page 269).

To assign a password:

1. Go to **Applications** ⊚ and select **Security** 🔒.

2. Select the **Password** box.

3. Assign a password and a password hint to your Treo 650.

4. Select the **Auto Lock Device** box.

5. When prompted, enter your password.

6. Select one of the following options:

   - **Never** prevents your Treo 650 from locking automatically. You can still lock your system manually by selecting **Lock & Turn Off** and then selecting **Off & Lock**.

   - **On power off** locks your Treo 650 when you turn off the screen, or when it shuts off with the auto-off feature.

   - **At a preset time** locks your Treo 650 at a specific time of day.

   - **After a preset delay** locks your Treo 650 after a period of inactivity.

Customizing
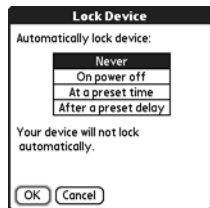
7. Select **OK**.

Setting Owner Preferences

You can use **Owner Preferences** to record information that you want to associate with your Treo 650, such as your name, company name, and phone number. If you system lock your device, the **Owner Preferences** information appears on the screen that requests your password to unlock it.

1. Go to **Applications** ✎ and select **Prefs** 📇.

2. Select **Owner**.

3. If you assigned a password with the Security application, select **Unlock**, enter your password, and then select **OK**.

4. Enter the text that you want to appear in the **Owner Preferences** screen.

5. Select **Done**.

Private Entries

In most applications, you can mark individual entries as private. All private entries remain visible and accessible until you select the Security setting to hide or mask them. When you hide entries, they do not appear anywhere in the application. When you mask entries, a visual placeholder appears where the entry would normally appear. However, as a security measure, masked Contacts entries are temporarily hidden when you perform a search. So you will not see a placeholder for masked entries when viewing the results of a **Lookup** or **Find** request.

If you define a password, you must enter it to display private entries. If you do not define a password, you (or anyone else) can reveal private entries without a password.

To make an entry private:

1. Display the entry that you want to mark private.
2. Select **Details**.
3. Check the **Private** box.
4. Select **OK**.

Hiding or Masking All Private Entries

1. Make sure the entries you want to hide or mask are marked private.
2. Go to **Applications** ⌾ and select **Security** 🔒.
3. Select the **Current Privacy** pick list and select either **Hide Records** or **Mask Records**.

Viewing All Private Entries

1. Go to **Applications** ⌾ and select **Security** 🔒.
2. Select the **Current Privacy** pick list and select **Show Records**.
3. If the Show Private Records dialog box appears, enter your password, and then select **OK**.

Viewing Private Entries in a Specific Application

1. Open the application that contains the private entries you want to display.
2. Open the **menus** ⌨.

3. Select **Options**, and then select **Security**.

4. Select the **Current Privacy** pick list and select **Show Records**.

5. Select **OK**.

Security and Palm® Desktop Software (Windows)

Palm Desktop for Windows observes the security password for your Treo 650. If you forget your Treo 650 password, you cannot view your information in Palm Desktop. You can change your password, but all entries marked as Private will be deleted. You can restore these entries the next time you synchronize your device with your computer.

1. Go to **Applications** and select **Security** .

2. Select the **Password** box.

3. Select the **Lost Password** box.

4. Select **Yes**.

If you want additional security for Palm Desktop files, you may wish to purchase a third-party solution.

Additional Features

Location

Your Sprint PCS Vision Smart Device is equipped with a Location feature for use in connection with location-based services which may be available in the future. Currently the location information is used to help identify your longitude and latitude position during an emergency call in areas where E-911 service is available.

You can prevent your location information from being provided during all calls except when you contact 911 in an emergency.

1. Press **Phone/Send** 📞.
2. Open the **menus** ✐.
3. From the **Options** menu, select **Phone Preferences**.
4. Check the **Location Privacy** box. (Your location information will not be shared except when you call 911 in an emergency.)

Check this box ⟶

> **Phone Preferences** ℹ
> Call forwarding:
> ▾ Off
> ☑ **Digital Roaming**
> ☐ **Location Privacy**
> ☐ **Short DTMF Tones**
> TTY/TDD Mode: ▾ Off
> ⟨ Clear Voicemail Icon ⟩
> ☑ **Ask to add unknown phone numbers after calls**
> ⟨ OK ⟩ ⟨ Cancel ⟩
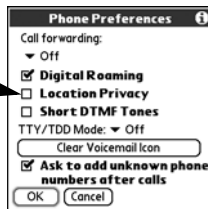
Virtual Private Networks

If you want to use your Treo device to access your corporate email account or other files on your corporate server, you may need to set up a virtual private network (VPN) on your Treo 650. A VPN enables you to log in to your corporate server through the company's firewall (security layer). Without a VPN, you cannot break through the firewall to gain access to the server.

You need to set up a VPN to access a corporate server in either of the following two situations:

- Your company's wireless local area network (LAN) is located outside the firewall.
- Your company's wireless LAN is located inside the firewall, but you are trying to access the network from outside the firewall (for example, from a public location or at home).

Check with your company's system administrator to see if a VPN is required to access the corporate network. If you need a VPN, you must purchase and install a third-party VPN client to use this feature.

Note:	The **Auto Sync** feature in the VersaMail® application may not work with a VPN connection.

1. Install your third-party VPN client. See "Installing Applications" on page 127 for details.
2. Go to **Applications** ✎ and select **Prefs** 📧.
3. Select **VPN**.
4. Enter the settings provided by your corporate system administrator.

Accessories for Your Device

These and other accessories are available for purchase at your local Sprint® Store or at www.Palm.com. For more information, you can also call the Sprint PCS Accessory Hotline at 800-974-2221 or visit www.sprint.com. Next day delivery is available in select areas.

- **Vehicle Power Charger**
  Charges your device in your vehicle using the car lighter socket.

- **Replacement Battery**
  Serves as a backup battery if your primary battery becomes drained, is charging, or has reached the end of its useful life.

- **USB Sync Cable**
  Provides an extra cable for quick USB synchronization of information between your Treo 650 and PC or Mac computer using a USB port.

- **USB Docking Cradle**
  Provides a convenient and elegant desktop solution for synchronizing info, charging your device with any USB-enabled PC or Mac computer, and charging a second battery.

- **Extra AC Charger**
  Provides an extra 100 - 240 volt AC charger for your device.

- **International Travel Adapters**
  Provides snap-on adapters for continental Europe, the United Kingdom, and Australia. For use with the Extra AC Charger only.

- **Leather Side Case With Belt Clip**
  Clips to your belt or bag and provides both quick access and protection for your device.

- **Stereo Headphone Adapter**
  Converts a mini-stereo phone connector to a 2.5mm connector so that it is compatible with the headset jack on your device. This enables you to listen to MP3 files on your Treo with your own stereo headphones.

- **Stylus**
  Provides a replacement or spare stylus for your device.

Sprint PCS Service Features

Sprint PCS Service Features—The Basics

In This Section

♦ **Using Voicemail**

♦ **Call Waiting**

♦ **Call Forwarding**

♦ **Three-Way Calling**

♦ **Sprint PCS Voice Command**℠

♦ **TTY Use With Sprint PCS Service**

Using Voicemail

Setting Up Your Voicemail

Your voicemail number is preset when you activate your device. The first time you call voicemail, you are prompted to enter your voicemail password. If necessary, please contact Sprint for your password and enter it as prompted.

1. Turn on your device, as described in "Turning Your Device's Phone On and Off" on page 35.

2. Press **Phone/Send** 📞.

3. Use the **5-way navigator** ⬤ to access **Favorites**.

4. Select the **Voicemail** favorite button.

5. Follow the system prompts to create your password and record your greeting.

Retrieving Your Voicemail Messages

When you have a new voicemail message, you are notified with an Alert screen and a voicemail icon 📬 that appears at the top of your screen.

Tip:	If you have multiple alerts, the Alert screen displays all your pending alerts. Select an item's description to jump to that item, or check the box to clear that item. To view all your pending alerts from any screen on your device, press and hold **Center**.

1. Press **Phone/Send** 📞.

2. From the Phone application **Main** view, **Dial Pad** view, or **Favorites** view, press and hold **1**.

3. Follow the system prompts.

Tip:	Enter your voicemail password using the Treo 650 keyboard, or select **Extra Digits** if you defined this option. See "Editing or Deleting an Existing Favorite Button" on page 74 for information on editing favorite buttons. Remember, you do not need to press **Option** to enter numbers, *, or # while on an active call.

Accessing Your Voicemail From Another Phone

1. Dial your Sprint PCS Phone Number.

2. Press ⬛*⬛ when your voicemail answers.

3. Enter your password, and then press ⬛#⬛.

Displaying Numeric Pages

1. From the New Message alert, highlight an item with a phone icon 📱.

2. Select **Go To** to view the page in the Messaging application.

Tip:	If you have multiple alerts, the Alert screen displays all your pending alerts. Select an item's description to jump to that item, or check the box to clear that item. To view all your pending alerts from any screen on your device, press and hold **Center**.

Call Waiting

When you are on an active call, you can receive a second call. When the second call comes in, the Call Waiting dialog box appears, giving you the following options for handling the second call:

- To put your first call on hold and answer the second call, press **Phone/Send** 📞 or use the **5-way navigator** ⊙ to select **Answer**.

- To continue your first call and send the second call to voicemail, use the **5-way** ⊙ to select **Ignore**.

Note:	When you answer a second call and then select the **Hang Up All** button, it ends both calls. In this situation the Natoinwide Sprint PCS Network automatically redials the number that was on hold so that you can continue the conversation.

Call Forwarding

Call Forwarding lets you forward your calls to another number. You can still make calls from your device while this is activated. There is a per-call charge for this service.

1. Press **Phone/Send** 📞.

2. Open the **menus** 📧.

3. Select **Options**, and then select **Phone Preferences**.
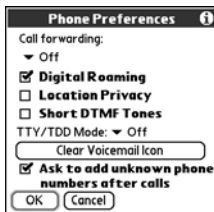
4. Select the **Call Forwarding** pick list.
   - If the forwarding number appears in the pick list, select the number.
   - If the forwarding number does not appear in the pick list, select **Edit Numbers**, and then select **New**. Enter a 10-digit forwarding number without spaces, and then select **OK**.

5. Select **OK**.

6. Call your Treo to confirm that call forwarding is active.

Three-Way Calling

Talking with two different people at the same time is made easy with Three-Way Calling.

1. Enter a number you wish to call, and then press **Phone/Send** 📞 to dial.

2. After you establish the connection, place a second call (see "Making a Second Call" on page 64). (You cannot initiate a three-way call if the second call is an incoming call.)

3. When you're connected to the second party, use the **5-way** ◎ to select **Conf.** to begin your three-way call.

Note:	If one of the people you called hangs up, you and the remaining caller stay connected. If you initiated the call and are the first to hang up, all three callers are disconnected.

4. To end the three-way call, press **Power/End** 📵.

Note:	When using Three-Way Calling, normal airtime rates apply for each of the two calls.

Sprint PCS Voice Command℠

If you subscribe to the Sprint PCS Voice Command service, you can call a number just by saying a name. (There is a monthly charge for Sprint PCS Voice Command service.)

To activate Sprint PCS Voice Command:

▶ Press **✱** **2**, and then press **Phone/Send** 📞.

Get Started by Setting Up Your Personal Address Book

1. Press **✱**, and then press **Phone/Send** 📞. Follow the system prompts. (You'll hear a tone followed by the prompt "Ready.")

2. Say "Add Name" to begin setting up your Personal Address Book.

Making a Call With Sprint PCS Voice Command

1. Press **✱**, and then press **Phone/Send** 📞. (You'll hear a tone followed by the prompt "Ready.")

2. After the prompt, say "Call" and the name of the person or the number you want to call. (Your request will be repeated and you will be asked to verify.)

3. Say "Yes" to call the number or person. Say "No" to cancel.

⌨ TTY Use With Sprint PCS Service

A TTY (also known as a TDD or Text Telephone), is a telecommunications device that allows people who are deaf or hard of hearing, or who have speech or language disabilities, to communicate by telephone.

Your device is compatible with select TTY devices. You can connect a TTY/TDD machine, a headset, or handsfree kit to your device through the headset jack while this mode is enabled. Please check with the manufacturer of your TTY device for connectivity information and to ensure that the TTY device supports digital wireless transmission.

When establishing your PCS Service, please call Sprint Customer Service via the state Telecommunications Relay Service (TRS) by first dialing 🔘7🔘 🔘1🔘 🔘1🔘, and then pressing **Phone/Send** 📞. Then provide the state TRS with this number: 866-727-4889.

To turn TTY mode on or off:

1. Press **Phone/Send** 📞.
2. Open the **menus** ✉.
3. Select **Options**, and then select **Phone Preferences**.
4. Select the TTY Mode pick list and select one of the following modes:
   - **Default Mode** sends and receives text.
   - **VCO Mode** sends voice and receives text.
   - **HCO Mode** sends text and receives voice.
   - **Off** disables TTY mode and sends and receives voice.

5. Select **OK**. A red T appears at the top of the Phone screen whenever TTY is enabled.

TTY Enabled
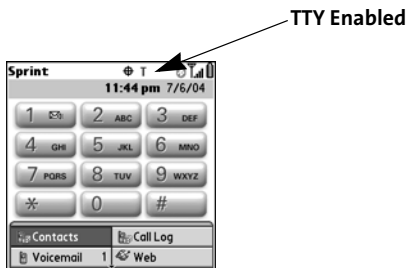
Important Notice:	Sprint recommends that TTY users make emergency calls by other means, including Telecommunications Relay Services (TRS), analog cellular, and landline communications. Wireless TTY calls to 911 may be corrupted when received by public safety answering points (PSAPs), rendering some communications unintelligible.

Sprint PCS Vision℠—The Basics

In This Section

♦ **Getting Started With Sprint PCS Vision**

♦ **Sprint PCS Vision Features**

♦ **Accessing Sprint PCS Vision**

Getting Started With Sprint PCS Vision

To sign up for Sprint PCS Vision services or to access complete instructions, visit **www.sprint.com**. For information on charges associated with features that use a Sprint PCS Vision connection, refer to your Sprint PCS Service Plan.

Opening Sprint PCS Vision

1. Make sure your device is turned on, as described in "Turning Your Device's Phone On and Off" on page 35.

2. Press **Option** ⟨🔘⟩, and then press **Phone/Send** ⟨📞⟩.

3. When the **Connect to the Internet** dialog box appears, select **Yes** to open a Sprint PCS Vision connection.

   - If you have not already done so, select **Now** when the **Preparing Vision Services** dialog box appears. This initiates a one-time process to configure your Sprint PCS Vision services. At the end of this two-minute process, your device connects to the Sprint PCS Vision home page.

   - If you want to cancel the connection, select **No**.

Tip:	To bypass the selection screen in the future, check the **Don't ask me again** box.

4. Use the **5-way** ⟨◎⟩ to scroll around and select from a variety of online services.

5. Go to **Applications** ⟨◌⟩ to exit the browser and end your session.

Sprint PCS Vision Features

With Sprint PCS Vision services, you have access to additional features, better performance, faster Web connections, and a wider variety of online services. Features such as Web access, graphically-enriched games, and sending/receiving digital images are available on your Treo 650 through the Nationwide Sprint PCS Network.

Sprint PCS Picture Mail℠
Take digital pictures and movies with the built-in camera (if included) and send them to email addresses or other Sprint PCS Vision phones.

Sprint PCS Video Mail
Shoot video clips and share them with friends and family right from your Treo 650.

Messaging
Send and receive email, text, and multimedia messages, or chat.

Games
Play exciting games with full-color graphics, sound, and vibration.

Ringers
Personalize your Treo 650 by downloading ringtones. You can use Sound preferences to assign these tones to different applications and speed dial favorite buttons to assign a tone to a specific contact.

Screen Savers

Download unique images to use as wallpaper, or make it easy to tell who's calling by assigning specific images to numbers in your speed dial favorite buttons.

Web

Experience full-color graphic versions of popular Websites.

Sprint PCS Business Connection℠

Secure, real-time access to your Microsoft Outlook or Lotus Notes company email, calendar, business directory, and personal contacts.

Accessing Sprint PCS Vision

Once your device is activated, you are signed in and ready to connect to Sprint PCS Vision services at any time.

Sprint PCS Vision User Name

Your Sprint PCS Vision User Name is automatically assigned to you. Your user name, which resembles an email address (for example, name@sprint.com), is used with Sprint PCS Mail and Messaging services. Remember, with Sprint PCS Business Connection, you can use virtually any email address (see "Sprint PCS Business Connection℠ Personal Edition" on page 205). Your Sprint PCS Vision User Name is simply an additional address that identifies your Sprint PCS Account. When your device is Vision-enabled, your user name automatically appears on the **Phone Info** screen.

To find your user name:

1. Press **Phone/Send** 📞.

2. Open the **menus** ✐.

3. Select **Options**, and then select **Phone Info**.

Sprint PCS Vision Symbols on Your Screen

📶 Device is not currently able to access Sprint PCS Vision service features.

📶 Connection is active (information is being transferred) when the arrows are green. Outgoing calls can be made, but incoming calls go directly to your voicemail.

Connected and voice calls can be sent and received when the arrows are gray.

Sprint PCS Vision Billing Information

See your service plan for details on Sprint PCS Vision billing.

Sending and Receiving Email

In This Section

- Setting Up an Account

- Creating and Sending Messages

- Receiving and Viewing Messages

- Managing Your Messages

- Customizing Your Email Settings

- Working With Microsoft Exchange ActiveSync®

- Sprint PCS Business Connection℠ Personal Edition

If you've activated Sprint PCS Vision, you're ready to set up the VersaMail® application on your Treo 650. You can use the VersaMail account with your Sprint email account, as well as with other email accounts, such as Yahoo! or Earthlink. You can also use VersaMail with a corporate account.

Email

Setting Up an Account

Before you can use VersaMail with a given email account, you need to set up the account in VersaMail. If you have multiple email accounts, you must set up a VersaMail account for each one. You have three setup options:

- On a Windows computer, if the email account is already set up on your computer—for example, if you use Outlook Express on your computer to access your Earthlink account—you can transfer the account settings to your device in just a few steps.

- On a Windows computer, if this is a new account, you can quickly set up the account on your computer and synchronize the information to your device.

- For either a new or an existing account, you can set up the account directly on your device.

If you are setting up a Microsoft Exchange ActiveSync® account, see "Working With Microsoft Exchange ActiveSync®" for more information, and see the *User Guide for the VersaMail Application* on the Software Installation CD for setup instructions.

Note:	VersaMail is not an email provider. It works with an account from a provider—your Sprint account, for example—or a corporate account to transfer messages to your device.

Transferring Settings From an Existing Account (Windows Only)

1. From the final screen of the **Software Installation CD**, select the option to set up your email software. Or select **Start > Programs > Palm > VersaMail Setup**.

2. Select your username from the first drop-down list, and then select the option to create a new VersaMail email account. Click **Next**.

3. Select the option to synchronize with an email account detected on your PC, and then select the account from the list. Click **Next**.

4. Enter a descriptive account name or use the one shown. Enter your email account password. Click **Next**.

Note:	If you are transferring existing account settings, your username and email address automatically appear on this screen.

5. Select whether to synchronize account information to your device or to set up another account, and then click **Next**.

6. When finished setting up all accounts, click **Finish**.

7. Synchronize to transfer all account information to your device.

Setting Up an Account on Your Computer (Windows Only)

If you set up an account on your computer and your email provider is not listed in the **Mail Service** list, select Other and see the *User Guide for the VersaMail Application* on the Software Installation CD for account setup instructions.

1. From the final screen of the **Software Installation CD**, select the option to set up your email software. Or select **Start > Programs > Palm > VersaMail Setup**.

2. Select your username from the first drop-down list, and then select the option to create a new VersaMail email account. Click **Next**.

3. Select the option to synchronize with a mail service from this list, and then select your mail service from the list. Click **Next**.

4. In the first field, enter a descriptive account name or use the one shown. In the next two fields, enter the username you use to access your email and your email account password. Enter your email address in the last field. Click **Next**.

5. Select whether to synchronize account information to your device or to set up another account, and then click **Next**.

6. When finished setting up all accounts, click **Finish**.

7. Synchronize to transfer all account information to your device.

Setting Up an Account on Your Device

1. Go to **Applications** 🔘 and select **VersaMail** 📧.

2. Open the **menus** 📝.

3. Select **Accounts**, and then select **Account Setup**.

4. Select **New**.

5. In the **Account Name** field, enter a descriptive name.

6. Select the **Mail Service** pick list, and then select your email provider. (Select **Other** if your provider is not listed. If you chose **Other**, select the **Protocol** pick list, and then select **POP or IMAP**. If your provider appeared in the list, the protocol is automatically selected and the Protocol pick list does not appear. Check with your email service provider to find the protocol for your email account as well as the names of the mail servers.)

7. Enter the username you use to access your email.

8. Select the **Password** box, enter your email account password, and then select **OK**.

9. Select **Next**. (If you chose a provider from the **Mail Service** pick list on the **Account Setup** screen, the mail server screen is already filled in. If you chose **Other**, enter your email address and the names of the incoming and outgoing mail servers.)

Tip:	To set more options for incoming and outgoing messages select **Advanced** on the **Account setup complete** screen.

10. Select **Next**, and then select **Done**.

Creating and Sending Messages

1. From the **Inbox**, select **New**.

2. Begin entering the addressee's email address, first name, or last name. (If the information matches one or more entries in Contacts, VersaMail displays the matching contacts. To accept a suggestion, select the correct contact. To send to a different address, keep entering the email address or name.)

Tip:	To send a copy or blind copy, select **Cc** or **Bcc**, select those lines, and enter the address(es) in those fields. See "Customizing Your Email Settings" on page 199 for details on displaying the Bcc field.

3. Enter the subject and message text. (To move between fields, press **Up** ▲ or **Down** ▼.)

Tip:	You can mark outgoing messages as high priority. Open the **Options** menu and select **Set Priority To High**.

4. Select one of the following buttons:

   ■ **Send** connects and sends all messages immediately. (If you select **Send** and the message cannot be sent for any reason, the message is stored in your **Outbox**. VersaMail continues attempting to send the message at the first available opportunity until the message is sent.)

- **Outbox** puts the message in the **Outbox** to send later.
- **Drafts** saves the message and continue working on it at another time.

Attaching Pictures and Videos

1. Create the message to which you want to attach the picture or video.

2. On the **New Message** screen, tap the paper clip icon 🔗 in the upper-right.

3. Select **Photo/Video** from the **Type** pick list.

4. On the **Select Media** screen, select the **Album** pick list to go to the album containing the picture or video you want, and then check the box to the left of the picture or video.

5. Select **Done**.
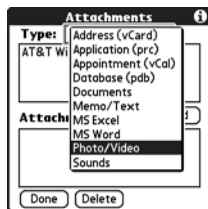
Tip:	Repeat steps 3 and 4 to attach more than one picture or video to a message. To remove an attachment, select the file in the **Attachments** box, and then select **Delete**.

Attaching Ringtones

1. Create the message to which you want to attach the ringtone.

2. On the **New Message** screen, tap the paper clip icon 📎 in the upper-right.

3. Select **Sounds** from the **Type** pick list.

4. Select the ringtone you want, and then select **Insert**.

5. Select **Done**.

| Note:	Ringtones that are copy protected appear in the Sounds application with a lock icon. These ringtones can be used on your phone only and cannot be sent as attachments.

Attaching Word, Excel, and PowerPoint Files

1. Create the message to which you want to attach the item.

2. On the **New Message** screen, tap the paper clip icon 📎 in the upper-right.

3. Select **Documents** from the **Type** pick list.

4. Select the file you want on the **Documents** screen.

5. Select **Done**.

Tip:	Repeat steps 3 and 4 to attach more than one file to a message. To remove an attachment, select the file in the **Attachments** box, and then select **Delete**.

Attaching Other Types of Files

1. Create the message to which you want to attach the item.

2. On the **New Message** screen, tap the paper clip icon 🔗 in the upper-right.

3. Select the type of file to attach—for example, **Address**, **Appointment**, or **Memo/Text**—from the **Type** pick list.

4. Select the file you want from the list in the **Type** box.

5. Select **Done**.

Tip:	Repeat steps 2 and 3 to attach more than one file to a message. To remove an attachment, select the file in the **Attachments** box, and then select **Delete**.

Receiving and Viewing Messages

1. Make sure your device is turned on (see "Turning Your Device's Phone ON" on page 35).
2. From any mailbox, select **Get** or **Get & Send**.
3. From the **Inbox**, select the message you want to view.
4. If a large incoming message is truncated, select **More** 🔅.
5. Select **Done**.

Replying to or Forwarding Messages

When you respond to messages, you can select whether to include the original text (see "Customizing Your Email Settings" on page 199).

1. From the **Inbox** or another folder, open the message to which you want to respond.
2. From the **Message** view, select **Reply**. (Select whether to reply to just the sender or reply to both the sender and all addressees on the messages.)
3. Enter your reply.
4. Select **Send**.

Viewing Attachments

There are a number of attachment types you can open with the built-in software on your Treo 650 (for example, Microsoft Word, Excel, and PowerPoint files; ringtones; and photos).

1. From any folder, open the message with the attachment you want to view. (Messages with downloaded attachments are indicated by a paper clip icon to the left of the message icon.)

Note:	If an attachment is not downloaded because it is larger than your maximum message size, the paper clip icon does not appear, and the attachment does not display at the bottom of the message screen. Select **More** to download and display any attachments.

2. Tap the attachment name to view it in the default viewer on your device.
   –or–
   Tap the folder icon to the left of the attachment name to open a menu of tasks you can do with the attachment, including **View**, **Install**, or **Unzip**, depending on the attachment file type; **Save** to save the attachment to your device or to an expansion card; or Select **Viewer** to select the application you want to use to view the attachment.

3. When you finish with the attachment, select **Done** to return to the **Attachments** dialog box. (If there is no **Done** button, go to **Applications** and select **VersaMail** to return to the **Inbox** of the account you were in.)

Managing Your Messages

The status icons that appear next to each message in your Inbox indicate the following:

✉   Part or all of a message text is downloaded.

𝕌   The message includes an attachment.

❗   This message is high priority.

You can rearrange the VersaMail list to make it easier to find and view messages.

- In the **Inbox**, select **Sort**, and then select one of the following: **Sort by Date**, **Sort by Name**, **Sort by Subject**.
- To quickly switch between folders in list view, select the folder pick list at the top of the screen and select the desired folder.

Deleting Selected Messages from the Inbox

When you delete a message from the Inbox, it moves to the Trash folder, which stores the 200 most recently deleted messages. If you delete more than 200 messages, the oldest messages are automatically removed from the device.

To delete selected messages:

1. Select the bullet next to the icon of each message that you want to delete. To select adjacent messages, drag the stylus so it hits the bullet to the left of each message. Lift the stylus and drag again to select more adjacent messages.

2. Open the **menus** ✎.

Email

3. Select **Delete** on the **Message** menu.

   4. If a confirmation message appears, select **OK** to confirm deletion.

Tip:	To empty (or purge) the Trash folder, open the **Message** menu and select **Empty Trash**.

Deleting Messages by Date

You can quickly delete a group of messages by selecting a range of dates.

   1. Open the **menus** ⓔ.

   2. Select **Delete Old** on the **Message** menu.

   3. Select the folder and a date range for the messages you want to delete.

   4. Select **OK**. (If a confirmation dialog box appears, select **OK** to confirm deletion.)

Switching Accounts

You can switch between different email accounts.

   1. Open the **menus** ⓔ.

   2. Select **Accounts**, and then select an account.

Customizing Your Email Settings

You can customize the VersaMail settings for each individual email account on your Treo. The preferences you set apply only to the email account you are currently viewing. If you have multiple accounts, configure each account separately.

You can customize the display of your mailbox screens, how and when to get new messages, alert sounds, reply options, and more. For complete instructions on customizing your email settings, see the *User Guide for the VersaMail Application* on the Software Installation CD.

Scheduling Auto Sync

You can set up VersaMail to automatically download new email messages to your device.

1. Open the **menus** .

2. Select **Options**, and then select **Preferences**.

3. Select **Auto Sync**.

4. Check the **Sync automatically** box.

5. Select the **Every** pick list and select the time interval, from 15 minutes to 12 hours. (If you set a more frequent interval, you may need to recharge your device's battery more often.)

6. Select the **Start Time** and **End Time** boxes, and then select the **hour**, the **minute**, and **AM** or **PM** to enter the time for the first and last Auto Sync to take place. Select **OK**.

7. Select the days you want the schedule to be active. You can choose any number of days, but you can set up only one schedule for each email account.

8. Select **OK**, and then select **Get Mail**. (Performing a manual Get Mail ensures that only new messages are retrieved during your next Auto Sync retrieval.)

Selecting alert tones

When you schedule Auto Sync for a given account, you can choose a sound—such as a bird, a phone, or an alarm—to let you know when new email arrives.

Note:	To receive notifications of successful Auto Sync retrievals only, uncheck the **Notify me of auto sync failures** box. Leave the box checked if you want to receive notifications of both successful and failed Auto Sync retrievals.

1. From any mailbox screen, open the **menus** ✉.

2. Select **Options**, and then select **Preferences**.

3. Select **Auto Sync**.

4. Select **Alerts**.

5. Check the **Notify me of new mail** box.

6. Select the **Notify Sound** pick list, and then select a sound. The device plays a brief demo of the sound.

7. Select **OK**.

Setting preferences for getting messages

1. From any mailbox screen, open the **menus** ✍.

2. Select **Options**, and then select **Preferences**.

3. Select **Delivery Options**.

4. Set any of the following preferences.

   - **Get** indicates whether to get message subjects only or entire messages.

   - **Ask Every Time** indicates if you want to see a dialog box for choosing subjects only or entire messages each time you retrieve email. If the box is unchecked, messages are retrieved according to the option you select in the Get pick list.

   - **Unread messages** sets whether to download only unread mail to your device (IMAP accounts only). If you don't choose this option and you select Get & Send, all of your messages on your provider's mail server are downloaded to your Inbox, including messages you have already read.

Note:	The POP protocol does not support retrieval of unread mail only from the server. If you have a POP email account, VersaMail downloads all messages regardless of whether you have read them, and regardless of whether this box is checked.

- **Mail from last** gets messages sent within the number of days you specify (default is 7).
- **Download Attachments** allows files attached to email to be automatically downloaded to your device. Attachments that exceed the maximum message size cannot be downloaded.
- **Maximum Message Size** sets the maximum size limit, in kilobytes (KB), of an incoming email message. The maximum size of an incoming message is 5KB by default, but you can enter any size up to 2048KB (approximately 2 megabytes, or 2MB), including attachments. The maximum message size that you can retrieve is 60KB for the body text and approximately 5MB of total data for any attachments.
- **Message Format** sets the format in which you retrieve messages. If you choose **HTML**, any messages sent in HTML format appear with basic HTML formatting intact. Other messages appear as plain text. If you choose **Plain Text**, all messages appear as plain text, regardless of the format in which they were sent.

Note:	The VersaMail application sends all messages as plain text only, with all HTML tags stripped, even if you are forwarding or replying to a message that was originally received as HTML.

5. Select **OK**.

Attaching a signature to a message

You can attach a personal signature, with info like your company's address and fax and telephone numbers, to the bottom of all messages you send.

1. From any mailbox screen, open the **menus** ✉.
2. Select **Options**, and then select **Preferences**.
3. Select **Signature**.
4. Check the **Attach Signature** box.
5. Enter your signature information, and then select **OK**.

Working With Microsoft Exchange ActiveSync®

Microsoft Exchange ActiveSync works with the VersaMail and Calendar applications on your device to directly access corporate groupware information on a Microsoft Exchange 2003 server. You can access business email and calendar info on the Exchange 2003 server from your device without using a desktop computer.

When you create an ActiveSync® account in the VersaMail application, both your email and calendar info synchronize directly with the Exchange server; information does not synchronize with the desktop software application on your computer, such as Microsoft Outlook or Palm Desktop software. Other information, such as contacts, tasks, and memos, continues to synchronize with your desktop software.

For complete information on using a Microsoft Exchange ActiveSync account, see the *User Guide for the VersaMail Application* on the Software Installation CD.

Sprint PCS Business Connection℠ Personal Edition

You can install the optional Sprint PCS Business Connection application for secure, real-time access to your Microsoft Outlook or Lotus Notes company email, calendar, business directory, and personal contacts. For more information and to sign up, visit www.sprint.com.

1. Go to **Applications** 🔘 and select **Get BC** 🔘.

2. Follow the onscreen instructions to download and install the software.

After you install the Sprint PCS Business Connection application on your device, you can access it by pressing **Messaging** 🔘.

Email

Messaging

In This Section

♦ **Creating and Sending Messages**

♦ **Receiving Messages**

♦ **Chatting With Messaging**

♦ **Managing Your Messages**

♦ **Customizing Your Messaging Settings**

Creating and Sending Messages

You can exchange brief text messages with other wireless phones that have text messaging capability. You can also send Sprint PCS Picture Mail messages (including images, videos, voice memos, and text) to other users. Both text messages and Sprint PCS Picture Mail messages can also be sent to email addresses. Before you use your Treo to send or receive messages, please verify pricing and availability with Sprint.

Creating and Sending a Text Message

You can exchange text messages of up to 160 characters. (If you send a text message to an email address, the email address is deducted from the 160 character count).

Note:	If you send a text message to an email address, the email address is deducted from the 160 character count.

1. Make sure your device is turned on, as described in "Turning Your Device's Phone On and Off" on page 35.

2. Press **Messaging** 📧 .

3. Select **New**.

4. Select the **To** pick list to address the message:
   - If the recipient's name appears in the **To** pick list, select it from the list.

- If the recipient is in your Contacts list, select **Lookup in Contacts**, and then start entering the first few letters of the recipient's first or last name. Highlight the recipient's mobile number or email address, and then press **Center**.
- If the recipient's name is not in the pick list or your Contacts list, enter the full mobile number or email address.

Tip:	You may need to press **Option** to enter letters or numbers. The Option Lock setting defaults to the setting you used the last time you addressed a message.

5. Press **Down** ▼ to jump to the body of the message.
6. Enter your message or select **QuickText** to insert predefined phrases.
7. (Optional) Open the **menus** , and then select **High Priority** on the **Compose** menu.
8. Select **Send**.

If you are out of a coverage area or if your device is off, outgoing messages go into the Outbox folder. When you return to a coverage area, your pending messages are sent automatically and are transferred to the Sent folder.

Creating and Sending a Sprint PCS Picture Mail Message

Sprint PCS Picture Mail messages consist of pictures, videos, text, and sounds. You can include pictures and videos you captured with the built-in camera (if included) as well as any of the following items:

- **QCELP sound clip** as a voice memo
- **JPEG Picture(s)** with up to 640 x 480 pixels

Messaging

- **MPEG4 Videos**
- **Text memo**

The first time you share a picture or video, you are prompted to establish a Sprint PCS Picture Mail Website account and password. Enter a four- to eight-digit, alpha-numeric password and press **Center**. Once you receive confirmation, you may continue to send or upload pictures and videos.

To create and send a multimedia message:

1. Make sure your device is turned on, as described in "Turning Your Device's Phone On and Off" on page 35.

2. Press **Messaging** 📧.

3. Select **New**.

4. Select the **To** pick list to address the message:

   - If the recipient's name appears in the **To** pick list, select it from the list.

   - If the recipient is in your Contacts list, select **Lookup in Contacts**, and then start entering the first few letters of the recipient's first or last name. Highlight the recipient's mobile number or email address, and then press **Center**.

   - If the recipient's name is not in the pick list or your Contacts list, enter the full mobile number or email address.

Tip:	You may need to press **Option** to enter letters or numbers. The Option Lock setting defaults to the setting you used the last time you addressed a message.

5. Select **Add**.

6. Select one or more of the following:

   - **Picture icon** lets you insert one or more pictures. You can take the pictures with the built-in camera (if included) or insert an existing picture.
   - **Video icon** lets you insert one or more videos. You can capture a video with the built-in camera (if included) or insert an existing video clip.
   - **Add Voice Memo** lets you record a message. You can add only one voice memo per message. If you capture a picture with the built-in camera (if included) and save it with a voice caption, the voice caption does not count as a voice memo.

7. Enter a text message or caption, or select **QuickText** ⌨ to insert predefined phrases.

8. Select **Send**.

Your device uploads the picture or video to the Sprint PCS Picture Mail Website, creates a private Guest Book for the recipient on the Sprint PCS Picture Mail Website, and sends your message to the recipient. The recipient can then use a Web browser to access this private Guest Book to view this picture or video and to enter comments. You can view the comments later from the Sprint PCS Picture Mail Website.

If you are out of a coverage area or if your device is off, outgoing messages go into the Outbox folder and are marked as pending. When you return to a coverage area, your pending messages are sent automatically.

Messaging

Messaging Tips

- You can address messages to multiple recipients by separating the addresses with a comma.

- When entering a message, you can insert emotive symbols by pressing **Center** and selecting emoticons, or insert predefined QuickText phrases by selecting **QuickText** and then selecting a phrase. To add a new phrase, select **Edit QuickText** from the list.

- You cannot use all symbols available on your device in your messages. The Messaging application automatically replaces invalid characters before it sends messages.

- You can send and receive text messages even while you are on a phone call. This is easiest when using the hands-free headset or speakerphone.

Receiving Messages

When your device is on and in a wireless coverage area, you automatically receive an alert when a new message is ready for you to view. You can configure the alerts to use a ringtone and vibration or simply an onscreen alert.

The new message alert may include any of the following buttons:

- **OK** dismisses the alert and places the message in your Inbox.
- **Reply** opens the **Chat** view so you can respond to the message.
- **Call Back** dials the sender's phone number.
- **Go To Msg** opens the text message so you can view its full contents.
- **Go To** opens the message so you can view its full contents in your online Sprint PCS Picture Mail account. See "Working With Your Online Picture Mail Album" on page 244 for details.

Messaging

Using Links in Messages

The Messaging application is designed to recognize links within a message and to give you quick access to them. When you receive a message that contains a recognizable telephone number, email address, or URL, you can dial the number, send an email message, or go to the Web page directly from the message.

1. Select a message from the list.

2. Select the phone number, email address, or URL (the link appears as underlined blue text).

3. Your Treo automatically opens the appropriate application from the link.
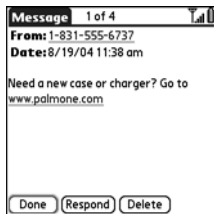
Chatting With Messaging

When you exchange more than one text message with a single contact, those messages are automatically grouped into a chat session, also known as a "thread." The upper part of the **Chat** view displays all text messages you've exchanged with this address, and the lower part provides a text entry area where you can continue the conversation. You can carry on multiple chats at the same time and easily switch between them, using the pick list at the top of the screen.

1. From the **Inbox**, select a chat.

2. Enter your message.

3. Select **Send**.

To find the conversations you had with someone, open your Messaging **Inbox** and select a chat session.

Tip:	To add pictures, sounds, or videos to your message, select **Add**.

Messaging

Managing Your Messages

The status icons that appear next to each message in the Inbox and Outbox folders indicate the following:

🗒	A text message. Unread messages appear in bold; messages you've read appear in plain text. Urgent messages appear with a red exclamation point (!).
💬	A chat session. Chats containing unread incoming messages appear in bold text.
📱	A voicemail page. An unopened voicemail page appears in bold.
🖼	An incoming Sprint PCS Picture Mail message. Unread messages appear in bold.
🖼	An incoming Sprint PCS Picture Mail message with sound. Unread messages appear in bold.

Arranging Messages

You can rearrange the messages in any folder using the **Sort** command. This makes it easier to find and view messages.

1. From list view, open the **menus** 🔘.

2. Select **View**, and then **Sort by Name** or **Sort by Date**.

Deleting Messages

You can also delete several messages at once from any folder using the **Purge** command.

1. From list view, open the **menus** ✉.

2. Select **Purge** on the **Message** menu.

3. Select the **Purge** pick list and select an option.

4. Select **OK**.

Messaging

Customizing Your Messaging Settings

1. Open the **menus** $\boxed{\text{☰}}$.

2. Select **Options**, and then select **Preferences**.

3. Set any of the following **Messages** preferences for your individual messages:

   - **Create new messages as** determines whether a blank text or Sprint PCS Picture Mail message appears when you create a new message.

   - **Confirm message deletions** determines whether deletion confirmation messages appear.

   - **Privacy Mode (hide text)** determines whether the body text appears in the alert when you receive a new message.

4. Set any of the following **Chat** preferences for your chat sessions:

   - **Thread messages from one person** indicates when you want to group text messages from the same person into a chat.

   - **Show timestamps in chats** displays the local date and time the message was sent next to each message.

   - **Display my name in chat window as** sets the text label for your messages in the **Chat** view.
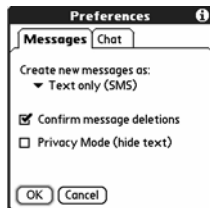
- **Label color** sets the label color for your messages in the **Chat** view.
- **Use color for** sets whether both the chat partner's name and message appear in a different color, or only the name.

5. Select **OK**.

Selecting Alert Tones

1. Open the **menus** $\textcircled{\scriptsize{\Xi}}$.
2. Select **Options**, and then select **Alerts**.
3. Select each pick list, and then select an **Alert Volume** and a **Vibrate** setting.
4. Select the **Tones** box.
    - Select the **Message Tone** pick list, and then select an alert tone for incoming messages.
    - Check **Show Message Alerts** to determine if you receive onscreen alerts when a new message arrives.
5. Select **Done.**

Messaging
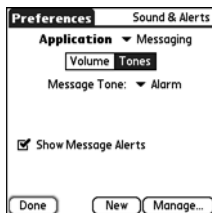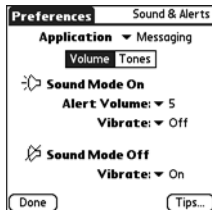
Browsing the Web

In This Section

♦ **Viewing Web Pages**

♦ **Working With Bookmarks**

♦ **Customizing Your Web Browser Settings**

The Web browser on your Treo 650 provides quick and easy access to Web pages.
You can view the regular Websites you use today, including sites with advanced
features, such as JavaScript, frames, and cookies, and secure sites, such as online
shopping, banking, and email sites. However, the Web browser does not support
plug-ins (Flash, Shockwave, etc.) or Java applets. Some secure sites require
specific browsers and may not work with the Web browser on your device.

To use your Treo 650 to browse the Web, you must first activate Sprint PCS Vision
data services.

Browsing the Web

Viewing Web Pages

The Blazer® Web browser uses patent-pending technology to optimize Web pages for your device. By default, the browser reformats Web pages into a single column and resizes images on your screen. This way, you can see most content without scrolling left or right.

1. Make sure your device is turned on, as described in "Turning Your Device's Phone On and Off" on page 35.

2. Press **Option** ⓘ, and then press **Phone/Send** ☎.

3. Navigate to the Web page you want:

   - To view mobile content designed specifically for your Treo, select ⌂.
   - To go to any page on the Internet, enter the address in the Address Bar, or select 🌐.
   - If you browse to a secure Web page, a Lock icon 🔒 appears in the Address Bar.
   - To view the previous or next page, select ◁ or ▷.
   - To refresh the page with the latest content available from the Internet, select ↻.
   - To view a list of sites you've visited, tap and hold ◁ or ▷.

- To switch between **Optimized** view (where content is optimized for your device) and **Wide Page** view (where content is formatted as it is on your computer and may require horizontal scrolling), select 📄.

- To scroll through the page in **Optimized** view, press **Up** ▲, **Down** ▼. In **Wide Page** view, press **Up** ▲, **Down** ▼, **Left** ◀, or **Right** ▶ to scroll in all directions.

- To follow a link to another Web page in **Optimized** view, highlight the link by press **Left** ◀, or **Right** ▶ to highlight the link, and then press **Center** to go to the selected page. You can also tap the link on the screen with your stylus.

- To move between the navigation bar and the page content, press **Space** ⬭.

- To adjust the font size, open the **menus** ✑, select **Options**, and then select **Font.** To fit more text on the screen, select **Small**. To make the text easier to read, select **Large**.

Tip:	The navigation bar shows status information while a page is loading. You don't have to wait for a page to fully load to navigate within the page or to select a link to another page. If graphics are slowing you down, you can browse the Web faster by turning off images. Open the **Options** menu, select **Preferences**, select **General**, and then check the **Disable Images** box.

Browsing the Web

Saving a Page

The Web browser lets you save single pages for offline viewing. This feature saves the page's text and images onto your Treo 650, so you don't need an Internet connection to view the page's content later.

1. Go to the page you want to save.
2. Open the **menus** .
3. Select **Save Page** from the **Page** menu.
4. Select **OK,** and then select **OK** again.

Downloading Files From a Web Page

The Web browser lets you download files (up to 2MB) that are usable on your Treo 650, such as ringtones, new applications, or pictures that are tagged specifically for download. When you download a file, it is automatically sent to the application that can use it. For example, if you download an MP3 file, you can store it on an expansion card and play it later in the RealPlayer® application on your device. You can also download files to an expansion card, even if the files are not usable on your Treo 650.

1. Go to the **Software** bookmark or to the Web page that contains the link to the file you want to download.
2. Press **Left** ◀ or **Right** ▶ to highlight the link to the file, and then press **Center** to initiate the download process.

| **Tip:** | You can also save an image from a Web page by tapping and holding it with the stylus. |

Copying Text From a Web Page

You can copy text from a Web page and paste it in other applications.

1. Use the stylus to highlight the text you want to copy.
2. Open the **menus** .
3. Select **Edit**, and then select **Copy**.
4. Go to the application in which you want to paste and position the cursor where you want to paste the text.
5. Open the **menus** .
6. Select **Edit**, and then select **Paste**.

Dialing a Phone Number on a Web Page

The Web browser can dial most phone numbers that appear on Web pages (see "Dialing From a Web Page" on page 55). If the Web browser does not recognize a phone number as dialable, you can copy the phone number (as text) and paste it into the Phone Dial Pad (see "Dialing Using the Onscreen Dial Pad" on page 52).

Creating Email From a Web Page

Email addresses often appear as links on Web pages. After you configure an email application on your Treo, you can select an email address link to create a message to the selected address.

Browsing the Web

Using the History List

The **History** list stores the addresses of the most recent pages you visited in the Web browser. If you want to go back to a page you remember visiting, but did not bookmark the page, you can use the **History** list to jump directly to that page. Items in the **History** list are sorted chronologically.

1. From the **Page** view, open the **menus** .
2. Select **History** from the **Page** menu.
3. Press **Down** ▼ to navigate through the list.
4. Select the Web page you want to load.

Finding Text on a Web Page

1. From the **Page** view, open the **menus** .
2. Select **Find Text on Page** on the **Page** menu.
3. Enter the text you want to find.
4. Check or uncheck the **Wrap Search** box to indicate whether you want the search to wrap from the end of the page to the beginning when the end is reached.
5. Select **Find** to start the search.

Working With Bookmarks

Creating a Bookmark

Bookmarks let you instantly access a Web page, without needing to enter the address every time. The Web browser can store up to 100 bookmarks or saved pages, allowing you to open your favorite Web pages quickly. Remember, a Web browser bookmark is different from a favorite button (see "Defining Favorite Buttons" on page 71).

Tip:	You can make Bookmarks view the default view when you open the browser. Open the **Options** menu and select **Preferences**. Select the **Start With** pick list and **s**elect **Bookmarks**.

1. Go to the page you want to bookmark.

2. Open the **menus** ✐.

3. Select **Add Bookmark** from the **Page** menu.

4. (Optional) Change the **Name** and **Description**.

5. Select **OK**, and then select **OK**.

Browsing the Web

Viewing Bookmarks or Saved Pages

Bookmarks and saved pages both appear in **Bookmarks** view. Saved pages are indicated by a small triangle in the upper-right corner of the bookmark.

1. Select the **Bookmarks** view icon ⊞.
2. Select the bookmark or saved page you want to view.

Saved page indicator

Editing or Deleting a Bookmark or Saved Page

You can edit or delete most bookmarks or saved pages. If you can't edit or delete a bookmark, it is locked.

1. From the **Bookmarks** view, open the **menus** ⟟.
2. Select **Edit Bookmarks** from the **Bookmarks** menu.
3. Select the bookmark you want to edit or delete.
4. Enter the desired changes.
5. Select **OK**.

Arranging Bookmarks and Saved Pages

The Web browser includes ten pages so that you can arrange bookmarks and saved pages in a logical fashion. For example, you can store travel links on one page, stock links on another, and business links on a third page.

You can arrange bookmarks and saved pages as you create them, or you can come back and arrange them later.

1. From the **Bookmarks** view, select **Edit**.

2. Enter a new title for this page.

3. Use the stylus to drag and drop bookmarks into different slots on the current page. (To move a bookmark to a different page, drag and drop it on the **Page** icon ▤.)

4. Select **OK**.
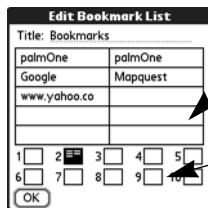
Bookmark slots

Page icons

Customizing Your Web Browser Settings

1. Open the **menus** .
2. Select **Options**, and then select **Preferences**.
3. Select **Page** and set any of the following preferences:

   - **Start With** determines which view displays every time you open the Web browser.
   - **Home Page** sets the Web page that appears when you select the **Home** icon.
   - **Restore Default** selects the original Sprint PCS Vision home page if you changed it.
   - **Show Address Bar** determines if the Web address appears in **Page** view. When it is visible, you can select the pick list to go to a previously viewed page, and enter a URL directly from **Page** view.

4. Select **General** and set any of the following preferences:

   - **Disable Auto Complete** determines if the Web browser suggests text, based on your previous entries, when you enter info.
   - **Disable Images (faster)** determines if images appear when you load a Web page. If you disable images, Web pages load faster, and you can still view images by tapping and holding the placeholder icon on the Web page.
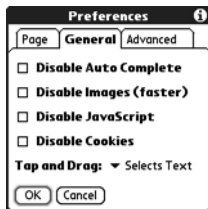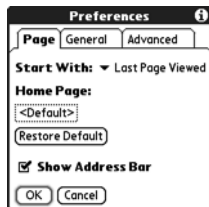
- **Disable Javascript** bypasses Javascript elements on the Web pages you view.
- **Disable Cookies** determines if Websites can store personalized information on your Treo 650. Some sites do not work properly if you select this option.
- **Tap and Drag** determines if dragging the stylus selects text or scrolls through the content of the page.

5. Select **Advanced** and set any of the following preferences:

- **Set memory limit for storing pages** sets the amount of memory used for your cache. Pages are cached so they load faster the next time you view them.

- **Cookies** indicates how much memory is being used by cookies. To free up this memory, select **Clear Cookies**.

- **Cache** indicates how much memory is being used by your cache to store recent pages and history. To free up this memory, select **Clear Cache**.

- **Clear cache on exit** determines if the cache clears each time you exit the Web browser.

- **Set Proxy** sets up a proxy server to access the Internet. If your connection requires a proxy server, please contact your Internet service provider or IT administrator for this information.
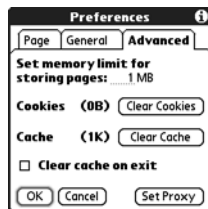
6. Select **OK**.

Note:	Setting a proxy server may prevent you from accessing some Sprint PCS Vision Web pages.

Using Your Device's Built-in Camera

In This Section

- ♦ **Taking Pictures and Videos**
- ♦ **Viewing Pictures and Videos**
- ♦ **Organizing Pictures and Videos**
- ♦ **Customizing Your Camera Settings**
- ♦ **Using Your Online Album**
- ♦ **Viewing Pictures and Videos on Your Computer**

Your Camera

Taking Pictures and Videos

If your Treo 650 does not include a camera, then the sections in this chapter about taking photos and videos do not apply to you. Even if your phone does not include a camera, you can still receive and view photos and videos, send photos and videos to other people as attachments or Sprint PCS Picture Mail, and use photos to personalize your device (such as wallpaper or photo caller ID).

You can store your pictures and videos on your device, upload them to albums on the Sprint PCS Picture Mail Website, move them to an expansion card, and copy them to your Windows computer by synchronizing your device with your computer.

Additional fees may apply for Sprint PCS Picture Mail service. Contact Sprint for additional information.

Taking a Picture

The camera takes 16-bit color pictures that are at a maximum VGA resolution of 640x480 pixels (0.3 megapixels), or 320x240 pixels in QVGA resolution. Videos are 320x240 in QVGA resolution or 176x144 in QCIF resolution.

To take a picture:

1. Go to **Applications** ✏️ and select **Camera** 📷.

2. Select the **album** pick list in the lower-right corner and select the album where you want to save the picture.

3. (Optional) Adjust the **zoom** and **resolution** settings.

4. Using your device screen as a viewfinder, aim the lens on the back of your Treo at the subject you want to photograph.

5. Press **Center** to take the picture.

6. (Optional) Select **Audio** 🔊 to add a voice caption.

7. Select one of the following buttons:

    - Select **Save** 💾 to keep the picture on your device.

    - Select **Delete** 🗑 to cancel the picture.

    - Select **Send** 📧 to insert the picture in a message. See "Creating and Sending a Sprint PCS Picture Mail Message" on page 209 and "Attaching Pictures and Videos" on page 192 for details.

    - Select **Upload** 📤 to place a copy in your Sprint PCS Picture Mail account. See "Uploading Pictures to Your Online Album" for details.

Your Camera

Recording a Video

1. Go to **Applications** ⌾ and select
    Camcorder 📹.
2. Select the **album** pick list in the lower-right
    corner and select the album where you want to
    save the video.
3. (Optional) Adjust the **resolution** setting.
4. Point the lens on the back of your Treo at the
    subject you want to record.
5. Press **Center** to start recording.
6. When you're done recording, press **Center** again to stop.
7. (Optional) Select **Play** ▶ to review the video.
    (Tap and drag the progress bar to jump to a
    different section of the video. Select **Pause** ⏸
    to pause video playback.)
8. Select one of the following buttons:

    ▪ Select **Save** 💾 to keep the video on
      your device.

    ▪ Select **Delete** 🗑 to cancel the video.

    ▪ Select **Send** ✉ to insert the video in a message. See "Creating and
      Sending a Sprint PCS Picture Mail Message" on page 209 and "Attaching
      Pictures and Videos" on page 192 for details.

- Select **Upload** 📷 to place a copy in your online Sprint PCS Picture Mail album. (See "Uploading Pictures to Your Online Album" on page 244 for details.)

Tip:	The video recording screen displays the approximate recording time you have left based on the space available on your device or expansion card. Actual recording time may vary depending on how fast you are moving, how many colors you are recording, and so on.

Your Camera

Viewing Pictures and Videos

Viewing a Picture

1. From the **Camera** view, select **Gallery** 🔲.
2. Select the picture you want to view.
3. Press **Up** ▲ and **Down** ▼ to zoom in and out.
4. If the picture has a voice caption, select **Audio** 🔍 to hear it.
5. Select **Done**.

Viewing a Video

1. From the **Camera** view, select **Gallery** 🔲.
2. Select the video you want to view.
3. Select **Play** ▶.
4. Press **Up** ▲ and **Down** ▼ to adjust the volume.
5. Select **Done**.

Viewing a Slide Show

1. From the **Camera** view, select **Gallery** 🔲.
2. Select **Slide show** 🖼.
3. Tap the screen to return to the **Gallery**.

Tips for Viewing Pictures and Videos

- You can also access the **Gallery** by going to **Applications** and selecting **Pics & Videos** .

- To change the **Gallery** display format, select **Thumb** and **List** .

- To view a different album, select the **album** pick list in the upper-right and select the album you want to view.

- To view an album stored on an expansion card, insert the card, and then select **Card** in the upper-right corner.

- To view other full-size pictures, press **Right** and **Left** .

- To rotate a picture, open the **Media** menu and select **Rotate Picture**. Select the picture you want to rotate, select the orientation, and then select **Done**.

- You can personalize a picture. Open the **Media** menu, select **Draw on Photo**, and then use the drawing tools to add your own personal touch. When you save the picture you can replace the original or save a copy.

Your Camera

Organizing Pictures and Videos

Arranging Albums

After you take pictures and record videos, you can use the **Gallery** to organize them.

+ indicates picture is in album

1. From the **Gallery**, select the **album** pick list in the upper-right and select the album you want to organize.

2. Select **Organize** 🔲.

3. Select a picture or video to add to or to remove it from the album.

4. Select **Done**.

Copying Pictures and Videos

You can copy pictures and videos from your device to an expansion card, and vice versa.

1. From the **Gallery**, select the picture(s) or video(s) you want to copy.

2. Open the **menus** 📝.

3. Select **Copy to Card** (for items on your device) or **Copy to Device** (for items on an expansion card) from the **Media** menu.

.

Tip:	To copy an entire album, open the **Media** menu and select **Copy Album to Card** or **Copy Album to Device**. Select the **album** you want, and then select **Copy**.

Deleting a Picture or Video From Your Device

1. From the **Gallery**, select the picture you want to delete.
2. Open the **menus** ✐.
3. Select **Delete** from the **Media** menu.
4. Select **Delete** to confirm deletion.

Saving a Picture as Wallpaper

1. From the **Gallery**, select the picture you want to use as wallpaper.
2. Open the **menus** ✐.
3. Select **Save as Wallpaper** from the **Media** menu.
4. When the confirmation message appears, confirm by selecting **Yes**, or decline by selecting **No**.

Your Camera

Customizing Your Camera Settings

While taking pictures or videos, you can adjust several camera settings.

1. From the **Still** or **Video** view, open the **menu** .

2. Set any of the following settings:

   - **Effects** sets the color palette for the current picture or video. You can't change an item's palette after you take the picture or video.

   - **Prompt sound** (photos only) sets the sound that plays before you take the picture.

   - **Shutter sound** determines whether a sound plays when you take a picture.

   - **Microphone** (videos only) turns the microphone on and off so that you can record videos with or without sound.

   - **Resolution** sets the default size for newly captured pictures or videos.

   - **Date stamp** (photos only) determines if the date the picture is taken appears on your pictures.

- **Review photos/videos** determines whether you can review pictures or videos before saving them and how long you to review them before they are automatically saved.
- **Auto naming** assigns a name to a series of pictures to be captured, such as Seattle001, Seattle002, etc.

3. Select **OK**.

Your Camera

Using Your Online Album

Uploading Pictures to Your Online Album

Your Sprint PCS Picture Mail account includes an online album on the Sprint PCS Picture Mail Website. You can use your online album to store and view pictures from your device or from a computer with Internet access.

Note:	The first time you upload a picture to your online album, you are prompted to create a password.

1. From the **Gallery**, select the picture(s) you want to upload.

2. Select **Upload** 📷.

Working With Your Online Picture Mail Album

1. From the **Gallery**, select 🔼 in the upper-right to access your online album.

2. Select any of the following:

   ▪ **Share Picture/Video** lets you share the selected picture or video.

   ▪ **Share Album** lets you to share the album you are currently viewing.

   ▪ **Picture/Video Options** moves, copies, downloads, and deletes pictures/ videos.

   ▪ **Back to Pics&Videos** returns to the Pics&Videos application on your device.

   ▪ **Thumbnails** displays thumbnail images of your online album.

- **Album List** lists all the albums in your Sprint PCS Picture Mail account.
- **New Album** lets you create a new album.

Tip:	You can also download and play videos from your online album, and you can listen to voice captions that are attached to pictures too.

Viewing Pictures and Videos on Your Computer

The pictures and videos you take with the built-in camera are automatically backed up onto your computer. You can view your pictures in JPEG format and your videos in MPEG4 format, and you can email them to friends with your desktop email application.

> **Tip:** You can also view, download, and manage your pictures and videos on your computer at **www.sprint.com/picturemail**.

● **Windows.** Refer to the Palm Desktop Online Help for information about using the Palm™ Media desktop application.

  ■ To find all synchronized images, look in: C:\Program Files\Palm\<User folder>\Photos\offline copy location

  ■ To find your captured pictures, look in: C:\Documents and Settings\<User name>\My Documents\My Pictures\Palm Photos\<User Folder>

  ■ To find your captured videos, look in: C:\Documents and Settings\<User name>\My Documents\My Videos\Palm Videos\<User Folder>

● **Mac.** There is no Palm Media desktop application for Mac computers.

  ■ To find your photos, open **Home/Pictures/Palm Photos/<Palm username>,** and then double-click the photo you want to view.

  ■ To find your videos, open **Home/Movies/Palm Videos/<Palm User Name>.** Use an application that supports ASF (MPEG4 video with ADPCM audio) files, such as QuickTime, to view your videos.

Help

Sprint

Help

Help

In This Section

- ♦ **Getting Help**
- ♦ **Upgrading from Another Palm Powered Device**
- ♦ **Resetting Your Treo 650**
- ♦ **Replacing the Battery**
- ♦ **Troubleshooting**
- ♦ **Errors**
- ♦ **Making Room On Your Treo 650**
- ♦ **Voice Quality**

Getting Help

This section presents answers to the questions and issues you are most likely to have while using your Treo 650.

Opening the Quick Tour

Your Treo 650 includes a built-in tutorial to teach you the basics. Open it any time, anywhere.

1. Go to **Applications** and select **Quick Tour** .
2. Follow the instructions and learn all about your Treo 650. (The Quick Tour walks you through the basics.)

Upgrading from Another Palm Powered Device

You can transfer all compatible applications and information from your previous device to your new Treo 650. This includes your calendar events, contacts, memos, and to do items, as well as your application settings and any compatible third-party applications and files.

During the installation, some third-party applications may be quarantined because they are not compatible with the Palm® OS software version 5.4 on your new Treo 650. Quarantined files are not installed on your smart device nor are they deleted; these files are placed in a new folder on your computer.

Note:	Some third-party utilities allow you to back up your old device's information onto an expansion card, and then transfer the information to your Treo 650. We do not recommend this method because any incompatible applications are also transferred.

To transfer all compatible applications and information from your previous device to your new Treo 650:

1. Calculate how much space your applications and information occupy on your old device. From the Applications Launcher (on some devices this is called the **Home** screen), open the menus. Select **Info** on the **App** menu. At the bottom of the screen, select **Size**. Look at the numbers on the **Free Space** line and subtract the number on the left from the number on the right to calculate the space used. For example, on the device shown here, 19.6 - 17.8 = 1.8. This means that 1.8MB of space is occupied on this device.

2. If the space occupied on your old device is less than 16MB, go to step 3. If more than 20MB is occupied, then do any of the following to free up some space before you go to the next step:

   - Delete any third-party applications that you no longer use.
   - Move large files, such as eBooks and images, to an expansion card.
   - Move third-party applications to an expansion card.
   - Purge old information in applications such as **Calendar** (**Date Book**), **To Do**, and email.
     Refer to the documentation that came with your old device for instructions on the items listed above.

3. Synchronize your old device with your old desktop software to back up your information one last time.

4. Install the desktop synchronization software from the Software Installation CD that came with your Treo 650 (see "Installing the Synchronization Software on Your Computer" on page 24).

Note:	Always use the same language for your Treo 650, your operating system, and your desktop software. Otherwise, you may lose information or have difficulty with synchronization. Support is not provided for mix-and-match language setups.

5. During the installation process, synchronize your computer with your new Treo 650. When prompted to select a username for your new device, be sure to select the existing username for your old device.

6. (**Mac users only**) If you have pictures on your old device, copy them from your old device to an expansion card or beam them to your new Treo 650 device.

7. If you plan to continue using your old device, perform a hard reset (see "Hard Reset" on page 259) to remove its associated username. Each device you synchronize with your computer must have a unique name. The next time you synchronize with your old device, be sure to assign it a new username.

If any third-party applications are quarantined during the installation, do not manually install any of the quarantined files. Contact the third-party developer for software updates and information about compatibility with your Treo 650.

What's New on Your Treo 650

After upgrading, there are a few things you need to know about your new device. If you're upgrading from a Treo™ 600, all of the following items apply to you. If you're upgrading from another device, some of these items may not apply to you.

- **Address Book.** This application is now called **Contacts**. To open **Contacts**, press the **Phone/Send** 📞 button, and then select the **Contacts** favorite.

- **Date Book+.** this application is now called **Calendar**. To access this application, press the **Calendar** 🗓 button.

- **Applications.** Some previous Palm Powered™ devices called this the Home screen or the **Applications Launcher**. To access this screen, press **Applications** 🔲.

- **Find.** Some previous Palm Powered devices opened this global search engine by tapping the magnifying glass icon in the Graffiti area. Now you can access it by pressing **Option** 🔘, and then pressing **Shift/Find** ⬆.

- **Menu items.** You can now access system menus by pressing **Menu** ☰ (see "Selecting Menu Items" on page 40).

- **Backlight.** Your Treo 650 smart device includes a keyboard backlight. The keyboard backlight activates automatically when the screen turns on. It shuts off automatically when the screen turns off and when an active call lasts longer than a minute.
- **Center button.** If you used a previous Treo 650, you probably pressed the **Spacebar** to activate commands or dial numbers. With the Treo 650, we recommend pressing **Center** to activate commands and pressing **Phone/Send** (\$) to dial.
- **Power/End button.** The fourth button on the right is used to turn your device on and off and to wake up the screen; it is not an application button.
- **Internet connection.** The Treo 650 was designed to work on the Sprint PCS Vision Network. When you sign up for a Sprint PCS Vision account, these settings are automatically transferred to your device; you don't need to do any extra setup. If you have trouble connecting to the Internet, you may need to contact Sprint and ask them to re-provision your Treo 650 for Sprint PCS Vision.
- **5-way navigator compatibility.** Some Palm OS 5 applications are optimized for 5-way navigation on devices other than the Treo 650. You may notice inconsistencies with software that is not designed with Treo 650 in mind.
- **Web browser bookmarks.** The Web browser on your Treo 650 can store up to 100 bookmarks, but you cannot import or transfer bookmarks from other Web browsers, such as Web Pro.
- **Photos.** You can use the Media Desktop application to transfer photos from your old device onto your Treo 650 (Windows only). To transfer photos from your old device onto your Treo 650, open the **Media Desktop** application, select your username, click **Add Media**, and then locate the files in the backup folder. The files may be located in any of the following folders:

- C:\Program Files\Palm\Treo Pictures\(user name)
- C:\Program Files\Handspring\Treo Pictures\(user name)
- C:\Program Files\Palm\Treo Pictures\(user name)

Trouble Upgrading?

If you experience problems with your Treo 650 after performing the upgrade steps in the previous section, you may have incompatible applications or settings that were not quarantined during the installation process. These files reside in your Backup subfolder. Incompatible applications or settings can lead to numerous issues, including system resets and freezes. If you experience problems after upgrading, follow these steps to correct the problem:

1. Locate your user folder on your computer:
   - **Windows:** If your username is one word, your user folder name is the same as your username. If your username is two words, your user folder name consists of the second word of your username followed by the first letter of the first word. For example, if your username is John Smith, your user folder is called SmithJ. Your user folder is usually located inside one of the following folders:
   C:\Program Files\Palm\
   C:\Program Files\Palm\
   C:\Program Files\Handspring\

- **Mac:** Your user folder name is the same as your username and is usually found in this location:
  (Mac hard drive) : Users : (Your Mac username) : Documents : Palm : Users.

2. Make a copy of your user folder and store it in a safe place.
   - **Windows:** Copy the folder, and then paste it to your Windows desktop.
   - **Mac:** Select the folder, press and hold the Option key, and then drag it to your Mac desktop.

3. Confirm that your copy includes the backup subfolder and that all the files in the original backup subfolder are also in the copy of the backup subfolder.

4. Delete all files from the original backup subfolder.

5. Perform a hard reset on your Treo 650. See "Resetting Your Treo 650" on page 258 for instructions.

6. Sync your Treo 650 with your new desktop software; and be sure to select your existing username.

7. Reinstall third-party applications from the copy of your backup subfolder. (See "Installing Applications" on page 127 for instructions.) We recommend that you install one application at a time to help you identify the application that caused the problem. We also recommend that you DO NOT install any applications that fall into any of the following categories:
   - Modify phone functions, such as ring tones, dialing, or caller ID
   - Replace organizer applications, such as **Contacts** or **Calender**
   - Set data connection features, such as activating or ending data connections

- Web clipping applications or files, such as PQA files
- Instant messaging applications

If you want to continue using these types of applications, please contact the third-party developer for software updates and information about compatibility with your Treo 650.

Visit the Knowledge Library at **http://www.palm.com/us/support/** for additional information about transferring information from your previous Palm Powered device to your Treo 650.

Resetting Your Treo 650

Soft Reset

A soft reset is similar to restarting a computer. If your Treo 650 is not responding or you have trouble synchronizing with your computer, a soft reset may help.

1. Press the **Battery Door Release** button and slide the battery door downward to remove it from your Treo 650.

2. Use the tip of the stylus to gently press the reset button on the back of your Treo 650.
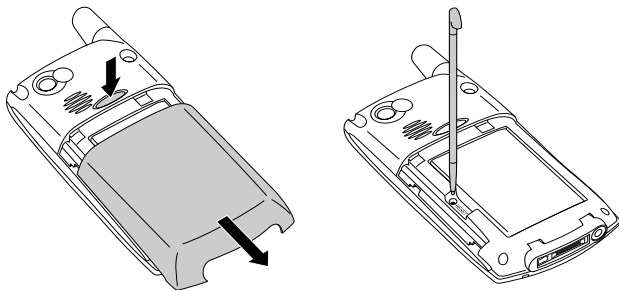
System Reset

A system reset, also called a safe or warm reset, tells your Treo 650 to stop what it's doing and start over again without loading any system extras. If your Treo 650 loops or freezes during a soft reset, a system reset may help. Performing a system

reset allows you to get out of an endless loop in order to uninstall a third-party application causing the looping.

If you need to perform a system reset and disable conflicting applications, always end the process with a soft reset. This returns your Treo 650 to normal operation.

1. Press the **Battery Door Release** button and slide the battery door downward to remove it from your Treo 650.
2. While pressing and holding **Up** ▲, use the tip of the stylus to gently press the reset button on the back of your Treo 650.
3. When the Palm Powered logo appears, release **Up** ▲.
4. Delete the third-party application that you suspect is causing the problem.
5. Perform a soft reset. (The wireless features of your device are not available until you complete this step.)

Hard Reset

A hard reset erases all information and third-party software on your Treo 650. **Never perform a hard reset without first trying a soft and system reset.** You can restore previously synchronized information the next time you synchronize.

A hard reset can tell you if a problem stems from your Treo 650 or from an application installed on it. If you do not experience the problem after you perform a hard reset, the problem may be related to software you installed. See "Third-Party Applications" on page 280 for suggestions on diagnosing third-party software issues.

Note:	Some third-party applications do not create a backup on your computer when you synchronize. If you perform a hard reset, you may lose data in these applications and you will need to reinstall these applications after the hard reset. Please contact the developer to find out which information is backed up during synchronization.

1. Press the **Battery Door Release** button and slide the battery door downward to remove it from your Treo 650.

2. While pressing and holding **Power/End** ✆, use the tip of the stylus to gently press the reset button on the back of your Treo 650.

3. Continue pressing and holding **Power/End** ✆. First the Palm logo appears with a progress bar, and then the circular Palm Powered logo appears. When the circular Palm Powered logo appears, release **Power/End** ✆.

4. When the "Erase all data?" prompt appears, press **Up** ▲ to confirm the hard reset.

Note:	If you do not see the "Erase all data?" message, the hard reset was not performed. Please retry the above steps, making sure to hold **Power/End** until the circular Palm Powered logo appears.

Replacing the Battery

Your Treo 650 comes with a replaceable battery. Be sure to use a Sprint-approved battery that is compatible with Treo 650.

1. Press **Power/End** to turn off the screen.

2. Press the **Battery Door Release** button and slide the battery door downward to remove it from your Treo 650.

3. Place a finger in the notch between the stylus and the battery and lift the battery up at a 45 degree angle.

4. Align the metal contacts on the battery with the contacts inside the battery compartment.

5. Insert the battery into the compartment at a 45-degree angle and then press it into place.

6. Slide the battery door onto the back of the device until it clicks into place.

7. Wait for your Treo 650 to turn on, and then enable the network time or set the date and time when prompted.

Battery Door Release

Battery Contacts

Phone Contacts

Notch
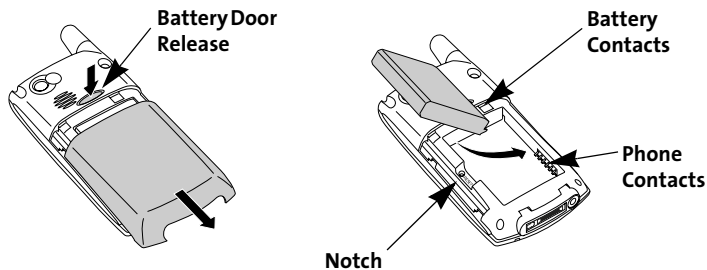
Troubleshooting

Desktop Software Installation

The software included with your Treo 650 installs the drivers that let you synchronize with Palm® Desktop software or Microsoft Outlook for Windows. If you're having difficulty installing the desktop software, please perform the following steps:

1. Restart your computer.

2. Quit any active applications, including virus scanners and Internet security applications.

3. Make sure you're installing the version of the software that came on the Software Installation CD with your Treo 650. (Other versions may not work with this Treo device.)

4. Make sure your computer profile includes administrator rights to install software. (In large organizations, these are usually granted by the system administrator.)

Note:	If you want to synchronize with a Personal Information Management (PIM) application other than Palm Desktop or Outlook, you must install a third-party solution. Contact the PIM's author or vendor to learn if software is available for the PIM.

Screen

The Screen Appears Blank

1. When a call lasts longer than one minute, the screen turns off. Press any key, except **Power/End** ⊘, to wake up the screen. (Pressing **Power/End** ⊘ hangs up the call.)

2. Look closely at the screen; if you can see a dim image, try adjusting the screen brightness (see "Adjusting the Brightness" on page 147).

3. If that doesn't work, perform a soft reset (see "Soft Reset" on page 258).

4. If that doesn't work, connect the Treo 650 to the AC charger (see "Charging the Battery" on page 6) and perform a soft reset again.

5. If that doesn't work, perform a hard reset (see "Hard Reset" on page 259).

The Screen Doesn't Respond Accurately to Taps or Activates Wrong Features

1. Go to **Applications** ⬚ and select **Prefs** ⬚.

2. Select **Touchscreen**.

3. Follow the onscreen instructions to align the screen.

4. Select **Done**.

Note:	If the problem persists, check for material trapped between the screen and the edge of the bezel. Material trapped in this area, including a bent or off-centered screen protector, can result in poor behavior, including the failure to respond accurately to taps.

There's a Blinking Symbol at the Top of the Screen

The blinking asterisk at the top of the screen is the **Alert Manager** symbol. It appears when you have alarms or messages that you haven't acknowledged.

1. Press and hold **Center** or tap the **Alert Manager** symbol with your stylus.
2. A list of pending alarms or messages appears.
   - Select the text of an alarm or message to view the item and keep it in the list.
   - Check the alarm or message box to clear it from the list, and then select **Done**.

Network Connection

Signal Strength Is Weak

Become familiar with low coverage areas where you live, commute, work, and play. Then, you will know when to expect signal strength issues.

- If standing, move about 10 feet in any direction.
- In a building, move near a window. Open any metal blinds.
- In a building, move outdoors or to a more open area.
- Outdoors, move away from large buildings, trees, or electrical wires.
- In a vehicle, move your Treo level with a window.

The Treo Won't Connect to the Mobile Network

- Try our suggestions above for weak signals.
- Turn off your device and turn it on again (see "Turning Your Device's Phone ON" on page 35).

- Confirm that the DUN setting is turned off in the Bluetooth® application (see "Using Dial-up Networking on Your Treo 650" on page 82).
- Perform a soft reset (see "Soft Reset" on page 258).

The Treo Hangs Up When You Hold It to Your Ear

You may be pressing the onscreen **Hang Up** button with your cheek. Make sure your face doesn't press against the screen. If this is uncomfortable, set the **Disable touchscreen when** option on the **Keyguard Preferences** screen to turn on during active calls (see "Auto-Keyguard and Touchscreen Lockout" on page 157).

The Treo Makes or Answers Calls When It's in a Briefcase or Pocket

Items in your briefcase or pocket may be pressing the onscreen **Answer** button, or otherwise activating screen items. If this happens, be sure to press **Power/End** to turn off the screen before placing it in your briefcase or pocket. You can also set the **Disable touchscreen when** option on the **Keyguard Preferences** screen to activate during incoming calls (see "Auto-Keyguard and Touchscreen Lockout" on page 157).

Your Device Seems to Turn Off by Itself

If a system error and reset occurs and your device's phone was on before the reset, then the phone automatically turns on after the reset. However, if the Treo 650 can't determine if your device's phone was on before the reset, it does not automatically turn on the phone (see "Turning Your Device's Phone On and Off" on page 35).

You Can't Make or Receive Calls With a Handsfree Device With Bluetooth Wireless Technology

Check all of the following:

- The **Bluetooth** setting is turned on in the Bluetooth application.
- Your device with Bluetooth wireless technology is charged and turned on.
- Your Treo 650 is within range (30 ft.) of the device with Bluetooth wireless technology.
- The Bluetooth application screen is closed.

The Treo 650 Won't Connect to the Internet

Your Treo 650 supports Sprint PCS Vision, a way to connect to the Internet that is persistent, faster, and more reliable than a regular dial-up connection. All Sprint customers can connect to the Internet, but to avoid high per-minute charges, we recommend that you subscribe to a Sprint PCS Vision plan.

- Press and hold **Power/End** 🕾 to turn off your device, and then turn your device back on again.
- Confirm that the DUN setting is turned off in the Bluetooth application (see "Using Dial-up Networking on Your Treo 650" on page 82).
- Perform a soft reset (see "Soft Reset" on page 258).
- Contact Sprint to verify that your subscription plan includes Sprint PCS Vision services, that these services have been correctly activated, and to confirm your username and password. Sprint should also be able to tell you if there are any outages in your area.

- Confirm that high-speed data services are correctly configured on your Treo 650:

1. Go to **Applications** and select **Prefs** .
2. Select **Network**.
3. If the **Service** field says **Untitled**, select the **Service** pick list and select **PCS Vision**. (If PCS Vision does not appear in the list, call Sprint for assistance.)
4. Select **Done**.

I Can't Send or Receive Sprint PCS Picture Mail or Messages

- Make sure your device is turned on (see "Turning Your Device's Phone ON" on page 35).
- Confirm that the DUN setting is turned off in the Bluetooth application (see "Using Dial-up Networking on Your Treo 650" on page 82).
- Contact Sprint to verify that your service plan includes the appropriate messaging services, that these services are correctly activated, and that messaging services are currently available at your location. (Sprint should be able to tell you if messaging services are experiencing transmission delays.)
- If possible, contact the recipient or sender of the message and make sure the receiving device can handle the type of file that is being sent.
- If a message arrives but does not display an alert, perform a soft reset (see "Soft Reset" on page 258).

Dial-Up Networking

My Computer Does Not Appear on the Trusted Devices Screen

- If you select Add Device and your computer does not appear on the list, select **Find More**.
- Make sure that the computer's Bluetooth setting is on and that the computer is discoverable. Check with your computer manufacturer for help with locating and changing these settings.
- Select **Find More** on the **Trusted Devices** screen again.

I Get a Message that There Is an Error Creating a DUN Connection With My Treo 650

- Re-create the trusted pair between your Treo 650 and your computer (see "Creating a Trusted Pair Between Your Treo 650 and Your Computer" on page 82).
- Make sure that the Bluetooth DUN setting on your Treo 650 is on (see "Enabling DUN on Your Treo 650" on page 84).

Synchronization (HotSync®)

Synchronization lets you back up your Treo 650 information onto your computer. If you ever need to perform a hard reset or otherwise erase all your information on your Treo 650, you can synchronize to restore the information from your computer. To make sure you always have an up-to-date backup of your info, synchronize frequently.

Before you attempt to synchronize, make sure you installed the desktop synchronization software from the Software Installation CD that came with your Treo 650.

Every device needs a unique name. Never synchronize more than one device to the same username on your computer.

Palm Desktop Software Does Not Respond to a Synchronization Attempt

As you complete the following steps, synchronize after each step. If the synchronization is successful, you do not need to complete the remaining steps. If the synchronization is not successful, continue to the next step.

1. Verify that the USB sync cable is securely connected at all points (see "Connecting Your Treo 650 to Your Computer" on page 22).

2. Make sure that HotSync Manager is running:

    ▪ **Windows**. Click the **HotSync Manager** icon Ⓖ in the lower-right corner of your computer screen and make sure **Local USB** is checked. If you don't see the **HotSync Manager** icon Ⓖ, click **Start**, select **Programs**, select **Palm,** and then select **HotSync Manager**.

    ▪ **Mac**. Find the **Palm** folder on your Mac hard drive. Double-click the **HotSync Manager** icon Ⓖ in the Palm folder. In the **Connection Settings** panel, set **Local Setup Port** to **Palm USB**.

3. Verify with your computer hardware vendor that your operating system supports your internal USB Controller.

4. Perform a soft reset (see "Soft Reset" on page 258).

5. If problems persist and you're synchronizing through a USB hub, try connecting the sync cable to a different USB port, or directly to your computer's built-in USB port.

6. Uninstall the Palm software.

7. Reboot your computer.

8. Reinstall the Software Installation CD that came with your Treo 650.

Synchronization Starts But Stops Without Finishing

If you upgraded from a previous Palm Powered device or received a system error, such as Sys0505, there may be conflicts with software on your device. As you complete the following steps, synchronize after each step. If the synchronization is successful, you do not need to complete the remaining steps.

1. Locate your **Backup** folder and rename the folder (e.g. BackupOld):
   - **Windows:** C:\Program Files\Palm\username
   - **Mac:** Mac HD\Applications\Palm\Users\username

2. Synchronize.

3. Manually reinstall any third-party applications you want on your phone. If necessary, use the items in the old Backup folder you moved.

4. (Windows only) If the Windows **New Hardware Wizard** appears, the synchronization process may be timing out before the wizard completes its job. Follow all instructions in the New Hardware Wizard, and try synchronizing again.

5. Uninstall **Palm software**.

6. Reboot your computer.

7. Reinstall the Palm Software Installation CD that came with your Treo 650.

Tip:	The HotSync Log can tell you when and why synchronization stopped. Right-click the **HotSync Manager** icon in your Windows System Tray, and then select **View Log**.

Synchronization Finishes But Information Does Not Appear Where It Should

1. Make sure you're synchronizing with the intended desktop Personal Information Manager (PIM).

   - The Software Installation CD that came with your Treo includes software to synchronize with Palm Desktop or Microsoft Outlook for Windows. If you use a different PIM, you will need to install third-party software to synchronize it with your Treo. (Consult the company that makes the PIM for more information.)

2. If there are multiple Palm Powered devices synchronizing with your computer, make sure you are synchronizing with the correct username. If information is not appearing in Palm Desktop, make sure the correct username is selected in the toolbar of Palm Desktop.

3. Open **HotSync Manager** ⊘ on your computer, and make sure the necessary conduits are set to **Synchronize the files**.

4. Uninstall the Palm software.

5. Reboot your computer.

6. Reinstall the Software Installation CD that came with your Treo 650.

7. **If you're using Microsoft Outlook, consider the following:**
   - With the included software, your Treo 650 can synchronize with the root folders of Contacts, Calendar, Tasks, and Notes. If you want to synchronize the addresses from a global Exchange Address Book, you must copy the addresses to your local Contacts list in Outlook (right-click the addresses, and then select **Add to Personal Address Book**).
   - Outlook subfolders and public folders are not accessible with the included software. You may wish to use a third-party solution instead.
   - If you're trying to synchronize offline, be sure to set your Outlook Calendar, Contacts, Notes, and Tasks to be available offline.

I Have Duplicate Entries in Microsoft Outlook After I Synchronize

1. Open **Microsoft Outlook** and delete the duplicate entries.
2. Manually enter any information you've added to your device since the last time you synchronized.
3. Go to the conduit dialog box for the affected application, and select **Desktop overwrites handheld**.
4. Synchronize your device and your computer.
5. In the conduit dialog box you selected in step 3, select **Synchronize the files**.

My Appointments Show Up in the Wrong Time Slot After I Sync

If you're using Microsoft Outlook:

1. Make sure that you installed the Microsoft Outlook conduit that came with your Treo 650. If you're not sure whether this software is installed, reinstall it.
2. Open **Microsoft Outlook** and correct the wrong entries.
3. Manually enter any data you added to your device after the last synchronization.
4. In the **Calendar** conduit dialog box, and select **Desktop overwrites handheld**.
5. Synchronize your device and your computer.
6. In the **Calendar** conduit dialog box, select **Synchronize the files**.

If you're using Palm Desktop software:

1. On your device, press **Calendar** ⌨.
2. Open the **menus** ⌨.
3. Select **Options**, and then select **Preferences**.
4. Uncheck the **New events use time zones** box (if it's checked).
5. On your computer, open **Palm Desktop software** and correct the wrong entries.
6. Manually enter any data you added to your device after the last synchronization.
7. In the **Calendar** conduit dialog box, select **Desktop overwrites handheld**.

8. Synchronize your device and your computer.

9. In the **Calendar** conduit dialog box, and select **Synchronize the files**.

To avoid this problem in the future, do not assign time zones to your events. Palm Desktop software does not support time zones.

Email

I Have Problems Using My Account

Occasionally you may experience problems using an email account after you set it up. If you followed the account setup procedure and are experiencing problems using the account, verify that the account complies with your email provider's requirements by following these steps:

- Verify both your password and your username for your email account.
- Some wireless service providers require you to be on their network to use your email account. If this is the case, be sure to use your provider's network as the connection type for the account.
- Some wireless service providers have other requirements specific to their service. For example, Yahoo! requires you to pay for a POP account in order to download email messages from your Yahoo! account to your device. Check with your service provider to see if any provider-specific requirements exist.
- Service provider settings change frequently. If your email account was working, but you are currently experiencing problems, check with your service provider to see if any of the account settings have changed.

I Have Problems Sending and Receiving Email

Short periods of time when email is unavailable are common due to server problems or poor wireless coverage. If you have problems sending or receiving

mail for an extended period of time, check with your ISP or email service provider to verify that the service is working properly.

Auto Sync Is Not Working

If Auto Sync is occurring and you turn your device off or the connection to your email service provider is disconnected, the Auto Sync fails.

I Have Problems Sending Email

If you are able to receive email messages but cannot send them, try these steps, in turn:

- Make sure your ISP or email provider allows you to access email on a wireless device. Several providers, like Hotmail, do not offer this option at all; other providers require an upgrade to access email on a wireless device.
- Turn on ESMTP. Many services require authenticated access, or ESMTP, to use their SMTP servers.
- Enter the name of a different outgoing mail server for sending mail. Many ISPs, such as cable companies, require that you have an Internet connection to their network to send email through their servers. In this case, you can almost always receive email from these accounts, but if you want to send email, you must send it through another server.

I Have Problems Synchronizing Messages on My Device with Messages on My Computer

Make sure you have chosen the same settings for the account on both your device and your computer. For example, if the account is set up on your device to use the POP protocol, check the HotSync Manager on your computer to make sure that POP is selected as the protocol for that account.

My vCard or vCal Email Attachment Isn't Forwarding Correctly

Palm Desktop software provides several features that work with email client software on a Windows computer. For these features to work correctly, the email client software must be properly set up. Follow these steps to check the settings:

1. Click **Start** on your computer, and then select **Settings**.
2. Select **Control Panel**.
3. Select **Internet Options**, and then click the **Programs** tab.
4. Make sure that the email field is set to the correct email client software.
5. Click **OK**.
6. Start the email client software and make sure it is configured as the default MAPI client. (Consult the documentation for your desktop email application for more information.)

After I Get Messages, Either Manually or Through Auto Sync, Messages Disappear From My Inbox

If you have an account that uses Microsoft Exchange ActiveSync®, when you perform an Auto Sync, the last seven days' worth of email messages are downloaded from your mail server to your Inbox. All messages older than seven days are deleted from your Inbox; they are not, however, deleted on the server.

You can change the setting in VersaMail® preferences to download fewer than seven days' worth of messages (in which case, more-recent messages will be deleted from your Inbox), or to downloaded all messages regardless of the date (in which case all messages will continue to appear in your Inbox).

I Am Using Microsoft Exchange ActiveSync, But the Last Seven Days of Email Messages and Calendar Events Are Not Downloading to my Device

Check with your system administrator to obtain the name of the mail server that offers you wireless access to the corporate mail system. If you cannot obtain the name of this server (some companies do not give it out, because they do not want wireless access to their servers), you cannot synchronize email messages and Calendar events with the server using Microsoft Exchange ActiveSync.

Web

I Can't Access a Page

First, make sure you have Internet access: open the Web browser to see if you can view a Web page you've successfully viewed before. To ensure that you're viewing the page directly from the Internet, open the **menus** ✏, select **Go**, and then select **Refresh**. Now try to view the page in question again. If it comes up blank, open the **menus** ✏, select **Go**, and then select **Refresh**.

If you still cannot access the page, it may be because the page contains only elements that are not supported by the Web browser. Unsupported elements include Flash, Shockwave, Java applets, VBScript, WML script, and media plug-ins.

Some Websites automatically redirect you to their true home page (for example, **http://www.palm.com/support** may resolve to **http://support.palmOne.com/esupport/html/start.jsp**). If the Web browser fails to observe the redirect, you can use a desktop browser to see the true home page's address, and enter that address in the Web browser.

An Image or Map Displays Too Small on the Treo Screen

The Web browser has two modes: Optimized and Wide Page. Optimized Mode re-sizes all images and page elements to make them fit on a single vertical column on the Treo screen. Switch to Wide Page mode to see the image in its original, full-size form (see "Viewing Web Pages" on page 222).

A Secure Site Refuses to Permit a Transaction

Some secure sites are very specific about which browsers they allow to conduct secure transactions. If you are having trouble using a secure site, please contact the site's Web master to make sure the site allows transactions using the Web browser.

I Can't Select an Email Address From a Web Page

If nothing happens when you select an email address on a Web page, you probably do not have an email application that supports this feature. Try setting up the VersaMail application. (See "Setting Up an Account on Your Device" on page 189 for details.)

Camera and Sprint PCS Picture Mail

If your Treo 650 does not include a camera, then the information in this section about taking photos does not apply to you.

The Sprint PCS Picture Mail application takes pictures at Small picture size (160x120 pixels) and Large picture size (640x480 pixels, or 0.3 megapixel). Here are some tips for taking good pictures with the built-in camera:

- Clean the camera's lens with a soft, lint-free cloth.
- Take pictures in brighter lighting conditions. Low-light images may be grainy, due to the sensitivity of the camera.

- Hold the camera as still as possible. You may want to support your picture-taking arm up against your body or a stationary object (such as a wall).
- Keep the subject of the pictures still. Exposure time is longer with lower light levels, so you may see a blur.
- For best results, verify that you have the brightest light source coming from behind you, lighting the subject's face. Avoid taking indoor pictures with the subject in front of a window or light.
- Make sure the subject is at least 16 inches away from the camera to ensure good focus.

Remember, when you synchronize, your Sprint PCS Picture Mail images are stored in the My Pictures/Palm Photos folder on your computer (see "Viewing Pictures and Videos on Your Computer" on page 246).

The Camera Preview Image Looks Strange

Some third-party applications overwrite the Treo 650's color settings with their own 8-bit color settings. This can affect the camera's preview mode. Delete third-party applications one by one until the preview image improves.

Third-Party Applications

Sometimes third-party applications can cause conflicts that interfere with the smooth operation of your Treo 650. Third-party applications that modify the wireless features of your Treo device may require extra troubleshooting.

If you recently installed an application and your Treo 650 seems to be stuck, try the following:

1. Perform a soft reset (see "Soft Reset" on page 258).

2. If the problem persists, perform a system reset (see "System Reset" on page 258).

3. Delete the most recently installed application from your Treo 650 (see "Removing Applications" on page 130).

4. If the problem persists, perform another system reset.

5. If possible, synchronize to backup your most recent info.

6. If you're unable to perform the steps above or the problem persists, locate your Backup folder on your computer and rename the folder (e.g. BackupOld):
   - **Windows:** C:\Program Files\Palm\username
   - **Mac:** Mac HD\Applications\Palm\Users\username).

7. Perform a hard reset (see "Hard Reset" on page 259).

8. Synchronize to restore the info in your built-in applications.

9. If the problem is resolved, begin reinstalling your third-party applications one at a time: double-click a single file in the original Backup folder that you renamed.

10. If the problem recurs, delete the last application you installed and report the problem to its developer.

Remember, not all third-party applications were written with the Treo 650 keyboard and 5-way navigator in mind. You may encounter strange behavior or errors in these applications if you use the keyboard and 5-way.

Getting More Help

Contact the author or vendor of any third-party software if you require further assistance. Sprint does not provide technical support for applications that are not built into your Treo 650.

Errors

Your Treo 650 is designed to minimize interruptions when a system error occurs. If Treo encounters a system error, it automatically resets itself and resumes functioning as normal. If possible, it even turns your device back on if it was on before the error occurred.

Note:	The Treo 650 may not re-establish a Sprint PCS Vision session after a hard reset. To manually establish a new Sprint PCS Vision session, open the Web browser.

Sometimes you might want to know more about an error. The Treo 650 uses a special interface to show error messages in greater detail.

1. Press the **Phone/Send** 📞 button.
2. Press **Center**, and then select **Dial Pad**.
3. Enter **##377**, and then press **Center**.
4. Review the screen with details about the conditions that led up to the most recent automatic reset.
5. Select **OK**.

Please note that third-party developers create their own error messages. If you do not understand an error message, please contact the developer of the application for help.

Fixing an Error 67 Message

   1. Press the **Phone/Send** 🕻 button.
   2. From the Dial Pad, dial **##data**.
   3. Open the **menus** ⬚.
   4. Select **Update Vision Profile** from the **Options** menu.
   5. Select **Now**.

Making Room On Your Treo 650

If you store a large number of entries, or install many third-party applications, the internal memory on your Treo 650 may fill up. Here are some common ways to clear space on your Treo device:

- **Sprint PCS Picture Mail.** Pictures can consume excessive memory. Move your pictures to an expansion card or upload them to your account on the Sprint PCS Picture Mail Website, and then delete large files from your Treo 650 (see "Deleting a Picture or Video From Your Device" on page 241).
- **Internet.** If you have set a large Web browser cache, you may wish to clear the cache (see "Customizing Your Web Browser Settings" on page 230).
- **Third-party applications.** You can delete infrequently used applications or move them to an expansion card (see See "Removing Applications" on page 130).
- **Email.** If you installed a third-party email application, you may have large attachments that can quickly consume memory on your Treo 650. Delete emails with large attachments. If you have hundreds of messages with or without attachments, you may wish to delete older messages to make room.

Also, remember that your Treo 650 includes an expansion slot, and that you can store applications and information on expansion cards. However, you still need some free memory on the Treo device itself to run applications from an expansion card.

Voice Quality

Is the Other Person Hearing an Echo?

- Try decreasing the volume on your Treo smartphone to avoid coupling or feedback on the other person's end. This applies to both the speakerphone and the built-in earpiece.
- Position the handset closer to your ear to prevent sound leaking back into the microphone. Keep your hand away from the microphone hole, which is on the bottom right side of the phone.
- If you're using Speakerphone mode with your Treo smartphone lying on a flat surface, try turning the smartphone "face down" (screen facing the surface).

Are You Hearing Your Own Voice Echo?

Ask the other person to turn down the volume on their device, or to hold their device closer to their ear.

Is Your Voice Too Quiet on the Other End?

Be sure to hold the bottom of the Treo smartphone, or the hands-free microphone, close to your mouth.

Glossary

1XRTT: The next generation of mobile Internet connectivity that allows for persistent data connections as long as you are actively using your data connection. The average data transmission rate is around 70kb/s although theoretical limits are 153.6kb/s. With Sprint PCS Vision plans, you pay a monthly rate for unlimited data transfer and you don't pay for connection time.

Alt (alternative) Ⓐⓛⓣ **:** A keyboard key. Enter a letter on the keyboard, and then press **Alt** Ⓐⓛⓣ to access variations such as international characters and symbols.

Applications: The screen on your Treo 650 from which you can open all applications.

Auto-off interval: The time of inactivity that passes before the screen on your Treo 650 turns off. The wireless features on your device are unaffected by this setting.

Beam: The process of sending or receiving an entry or application using the infrared port on your Treo 650.

HotSync®: The technology that synchronizes your Treo 650 and your computer with the simple press of a button.

HotSync Manager: The computer application that manages the synchronization with your Treo 650.

Infrared (IR): A way of transmitting information using light waves. The IR port on your Treo 650 lets you transfer information between other IR devices within a short radius.

Lithium Ion (Li-Ion): The rechargeable battery technology used in Treo devices.

Option key : The keyboard button that lets you access the alternative feature that appears above the letter on each key.

Palm Desktop: A PIM application for computers that helps you manage your personal information and keep your personal information synchronized with your Treo 650.

Palm OS®: The operating system of your Treo 650. Palm OS is known for its simplicity of use and for the large number of applications that can be added to your Treo 650.

Palm™ Quick Install: The component on your Windows computer that enables you to install Palm OS applications and other information on your Treo 650.

Phone: The application on your Treo 650 that provides quick access to the most commonly used applications on your Treo device.

PIM (Personal Information Management): A genre of software that includes applications such as Palm Desktop software, Microsoft Outlook, Lotus Notes, and ACT!. PIMs generally store contacts, schedules, tasks, and memos.

SMS (Short Messaging Service): The service that exchanges short text messages almost instantly between mobile phones. These messages can usually include up to 160 characters.

Sprint PCS Business Connection℠: A service offered by Sprint that lets you access your existing corporate or personal email on your Treo 650. For more information, visit www.sprint.com.

Sprint PCS Vision: The next generation of mobile Internet access that lets you check your email, browse the Web, and share pictures and videos with Sprint PCS Picture Mail.

Sprint PCS Picture Mail: An enhanced Sprint PCS Vision messaging service that lets you instantly share pictures with friends and family. You can also manage your pictures online.

Sprint PCS Video Mail: An enhanced Sprint PCS Vision messaging service that lets you instantly share videos with friends and family. You can also manage your videos online.

Username: The name associated with your Treo 650 that distinguishes it from other Palm Powered™ devices. When you first synchronize your Treo 650, you are asked to give it a username.

Safety and Terms and Conditions

Sprint

Safety

In This Section

♦ **Getting the Most Out of Your Reception**

♦ **Maintaining Safe Use of and Access to Your Device**

♦ **Caring for the Battery**

♦ **Acknowledging Special Precautions and the FCC Notice**

♦ **Consumer Information on Wireless Phones**

♦ **Using Your Phone with a Hearing Aid Device**

♦ **Owner's Record**

♦ **User's Guide Proprietary Notice**

Part of getting the most out of your Sprint PCS Vision Smart Device is learning how the phone works and how to care for it. This section outlines performance and safety guidelines that help you understand the basic features of your phone's operation.

Getting the Most Out of Your Reception

Keeping Tabs on Signal Strength

The quality of each call you make or receive depends on the signal strength in your area. Your phone informs you of the current signal strength by displaying a number of bars next to the signal strength icon. The more bars displayed, the stronger the signal. If you're inside a building, being near a window may give you better reception.

Understanding the Power Save Feature

If your phone is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your phone is active, it periodically rechecks service availability; you can also check it yourself by pressing any key. Anytime the Power Save feature is activated, a message is displayed on the screen. When a signal is found, your phone returns to standby mode.

Understanding How Your Phone Operates

Your phone is basically a radio transmitter and receiver. When it's turned on, it receives and transmits radiofrequency (RF) signals. When you use your phone, the system handling your call controls the power level. This power can range from 0.006 watts to 0.2 watts in digital mode.

Knowing Radiofrequency Safety

The design of your Sprint PCS Vision Phone complies with updated NCRP standards described below.

In 1991-92, the Institute of Electrical and Electronics Engineers (IEEE) and the American National Standards Institute (ANSI) joined in updating ANSI's 1982 standard for safety levels with respect to human exposure to RF signals. More than 120 scientists, engineers and physicians from universities, government health agencies and industries developed this updated standard after reviewing the available body of research. In 1993, the Federal Communications Commission (FCC) adopted this updated standard in a regulation. In

August 1996, the FCC adopted hybrid standard consisting of the existing ANSI/IEEE standard and the guidelines published by the National Council of Radiation Protection and Measurements (NCRP).

Maintaining Your Phone's Peak Performance

There are several simple guidelines to operating your phone properly and maintaining safe, satisfactory service.

- Hold the phone with the antenna fully-extended and over your shoulder.
- Try not to hold, bend, or twist the phone's antenna.
- Don't use the phone if the antenna is damaged.
- Speak directly into the mouthpiece.
- Avoid exposing your phone and accessories to rain or liquid spills. If your phone does get wet, immediately turn the power off and remove the battery.

Note:	For the best care of your phone, only Sprint authorized personnel should service your phone and accessories. Faulty service may void the warranty.

Maintaining Safe Use of and Access to Your Device

FAILURE TO FOLLOW THE INSTRUCTIONS OUTLINED MAY LEAD TO SERIOUS PERSONAL INJURY AND POSSIBLE PROPERTY DAMAGE

Using Your Phone While Driving

Talking on your phone while driving (or operating the phone without a hands-free device) is prohibited in some jurisdictions. Laws vary as to specific restrictions. Remember that safety always comes first.

When using your phone in the car:

- Get to know your phone and its features, such as speed dial and redial.
- When available, use a hands-free device.
- Position your phone within easy reach.
- Let the person you are speaking to know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions.
- Do not take notes or look up phone numbers while driving.
- Dial sensibly and assess the traffic; if possible, place calls when stationary or before pulling into traffic.
- Do not engage in stressful or emotional conversations that may divert your attention from the road.
- Dial 911 to report serious emergencies. It's free from your wireless phone.
- Use your phone to help others in emergencies.
- Call roadside assistance or a special non-emergency wireless number when necessary.

Tip:	Purchase an optional hands-free device at your local Sprint Store, or call the Sprint PCS Accessory Hotline℠ at 1-800-974-2221 or by dialing **# 2 2 2** on your Sprint PCS Vision Phone.

Following Safety Guidelines

To operate your phone safely and efficiently, always follow any special regulations in a given area. Turn your phone off in areas where use is forbidden or when it may cause interference or danger.

Using Your Phone Near Other Electronic Devices

Most modern electronic equipment is shielded from radiofrequency (RF) signals. However, RF signals from wireless phones may affect inadequately shielded electronic equipment.

RF signals may affect improperly installed or inadequately shielded electronic operating systems and/or entertainment systems in motor vehicles. Check with the manufacturer or their representative to determine if these systems are adequately shielded from external RF signals. Also check with the manufacturer regarding any equipment that has been added to your vehicle.

Consult the manufacturer of any personal medical devices, such as pacemakers and hearing aids, to determine if they are adequately shielded from external RF signals.

Note:	Always turn off the phone in health care facilities and request permission before using the phone near medical equipment.

Turning Off Your Phone Before Flying

Turn off your phone before boarding any aircraft. To prevent possible interference with aircraft systems, the U.S. Federal Aviation Administration (FAA) regulations require you to have permission from a crew member to use your phone while the plane is on the ground. To prevent any risk of interference, FCC regulations prohibit using your phone while the plane is in the air.

Turning Off Your Phone in Dangerous Areas

To avoid interfering with blasting operations, turn your phone off when in a blasting area or in other areas with signs indicating two-way radios should be turned off. Construction crews often use remote-control RF devices to set off explosives.

Turn your phone off when you're in any area that has a potentially explosive atmosphere. Although it's rare, your phone and accessories could generate sparks. Sparks can cause an explosion or fire, resulting in bodily injury or even death. These areas are often, but not always, clearly marked. They include:

- Fueling areas such as gas stations.
- Below deck on boats.
- Fuel or chemical transfer or storage facilities.
- Areas where the air contains chemicals or particles such as grain, dust, or metal powders.
- Any other area where you would normally be advised to turn off your vehicle's engine.

Note:	Never transport or store flammable gas, liquid, or explosives in the compartment of your vehicle that contains your phone or accessories.

Restricting Children's Access to your Phone

Your Sprint PCS Phone is not a toy. Children should not be allowed to play with it because they could hurt themselves and others, damage the phone or make calls that increase your phone bill.

Caring for the Battery

Protecting Your Battery

The guidelines listed below help you get the most out of your battery's performance.

- Use only Sprint-approved batteries and desktop chargers. These chargers are designed to maximize battery life. Using other batteries or chargers voids your warranty and may cause damage.

- In order to avoid damage, charge the battery only in temperatures that range from 32º F to 113º F (0º C to 45º C).

- Don't use the battery charger in direct sunlight or in high humidity areas, such as the bathroom.

- Never dispose of the battery by incineration.

- Keep the metal contacts on top of the battery clean.

- Don't attempt to disassemble or short-circuit the battery.

- The battery may need recharging if it has not been used for a long period of time.

- It's best to replace the battery when it no longer provides acceptable performance. It can be recharged hundreds of times before it needs replacing.

- Don't store the battery in high temperature areas for long periods of time. It's best to follow these storage rules:
  - Less than one month:
    -4º F to 140º F (-20º C to 60º C)
  - More than one month:
    -4º F to 113º F (-20º C to 45º C)

Disposal of Lithium Ion (LiIon) Batteries

For safe disposal options of your LiIon batteries, contact your nearest Sprint-authorized service center.

Special Note: Be sure to dispose of your battery properly. In some areas, the disposal of batteries in household or business trash may be prohibited.

Note:	For safety, do not handle a damaged or leaking LiIon battery.

Acknowledging Special Precautions and the FCC Notice

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Antenna Care/Unauthorized Modifications

Use only the supplied integral antenna. Unauthorized antenna modifications or attachments could damage the unit and may violate FCC regulations. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Safety Statement

In order to comply with FCC RF exposure safety guidelines, users MUST use one of the following types of body-worn accessories.

1. A Palm brand body-worn accessory that has been tested for SAR compliance and is intended for use with this product.
2. An accessory that contains NO metal (snaps, clips, etc.) and provides AT LEAST 1.5 cm of separation between the users body and the unit.

Do NOT use the device in a manner such that it is in direct contact with the body (i.e. on the lap or in a breast pocket). Such use will likely exceed FCC RF safety exposure limits See **www.fcc.gov/oet/rfsafety/** for more information on RF exposure safety.

Specific Absorption Rates (SAR) for Wireless Phones

The SAR is a value that corresponds to the relative amount of RF energy absorbed in the head of a user of a wireless handset.

The SAR value of a phone is the result of an extensive testing, measuring and calculation process. It does not represent how much RF the phone emits. All phone models are tested at their highest value in strict laboratory settings. But when in operation, the SAR of a phone can be substantially less than the level reported to the FCC. This is because of a variety of factors including its proximity to a base station antenna, phone design and other factors. What is important to remember is that each phone meets strict federal guidelines. Variations in SARs do not represent a variation in safety.

All phones must meet the federal standard, which incorporates a substantial margin of safety. As stated above, variations in SAR values between different model phones do not mean variations in safety. SAR values at or below the federal standard of 1.6 W/kg are considered safe for use by the public.

The highest reported (FCC) SAR values of the Sprint PCS Vision℠ Smart Device Treo™ 650, by Palm are:

Maximum SAR Values	CDMA Cellular	CDMA PCS
Held to Ear	1.50 (W/Kg)	1.33 (W/Kg)
Body - Worn	.999 (W/Kg)	.667 (W/Kg)

FCC Radiofrequency Emission

This phone meets the FCC Radiofrequency Emission Guidelines and is certified with the FCC as

FCC ID number: O8FMADECA.

More information on the phone's SAR can be found from the following FCC Website: **https://gullfoss2.fcc.gov/prod/oet/cf/eas/reports/GenericSearch.cfm**.

Consumer Information on Wireless Phones

(The following information comes from a consumer information Website jointly sponsored by the U.S. Food and Drug Administration (FDA) and the Federal Communications Commission (FCC), entitled "Cell Phone Facts: Consumer Information on Wireless Phones." The information reproduced herein is dated July 29, 2003. For further updates, please visit the Website: **http://www.fda.gov/cellphones/qa.html**.)

What is radiofrequency energy (RF)?

Radiofrequency (RF) energy is another name for radio waves. It is one form of electromagnetic energy that makes up the electromagnetic spectrum. Some of the other forms of energy in the electromagnetic spectrum are gamma rays, x-rays and light. Electromagnetic energy (or electromagnetic radiation) consists of waves of electric and magnetic energy moving together (radiating) through space. The area where these waves are found is called an electromagnetic field.

Radio waves are created due to the movement of electrical charges in antennas. As they are created, these waves radiate away from the antenna. All electromagnetic waves travel at the speed of light. The major differences between the different types of waves are the distances covered by one cycle of the wave and the number of waves that pass a certain point during a set time period. The wavelength is the distance covered by one cycle of a wave. The frequency is the number of waves passing a given point in one second. For any electromagnetic wave, the wavelength multiplied by the frequency equals the speed of light. The frequency of an RF signal is usually expressed in units called hertz (Hz). One Hz equals one wave per second. One kilohertz (kHz) equals one thousand waves per second, one megahertz (MHz) equals one million waves per second, and one gigahertz (GHz) equals one billion waves per second.

RF energy includes waves with frequencies ranging from about 3000 waves per second (3 kHz) to 300 billion waves per second (300 GHz). Microwaves are a subset of radio waves that have frequencies ranging from around 300 million waves per second (300 MHz) to three billion waves per second (3 GHz).

How is radiofrequency energy used?

Probably the most important use of RF energy is for telecommunications. Radio and TV broadcasting, wireless phones, pagers, cordless phones, police and fire department radios, point-to-point links and satellite communications all rely on RF energy.

Other uses of RF energy include microwave ovens, radar, industrial heaters and sealers, and medical treatments. RF energy, especially at microwave frequencies, can heat water. Since most food has a high water content, microwaves can cook food quickly. Radar relies on RF energy to track cars and airplanes as well as for military applications. Industrial heaters and sealers use RF energy to mold plastic materials, glue wood products, seal leather items such as shoes and pocketbooks, and process food. Medical uses of RF energy include pacemaker monitoring and programming.

How is radiofrequency radiation measured?

RF waves and RF fields have both electrical and magnetic components. It is often convenient to express the strength of the RF field in terms of each component. For example, the unit "volts per meter" (V/m) is used to measure the electric field strength, and the unit "amperes per meter" (A/m) is used to express the magnetic field strength. Another common way to characterize an RF field is by means of the power density. Power density is defined as power per unit area. For example, power density can be expressed in terms of milliwatts (one thousandth of a watt) per square centimeter (mW/cm2 or microwatts (one millionth of a watt) per square centimeter (μW/cm2).

The quantity used to measure how much RF energy is actually absorbed by the body is called the Specific Absorption Rate or SAR. The SAR is a measure of the rate of absorption of RF energy. It is usually expressed in units of watts per kilogram (W/kg) or milliwatts per gram (mW/g).

What biological effects can be caused by RF energy?

The biological effects of radiofrequency energy should not be confused with the effects from other types of electromagnetic energy.

Very high levels of electromagnetic energy, such as is found in X-rays and gamma rays can ionize biological tissues. Ionization is a process where electrons are stripped away from their normal locations in atoms and molecules. It can permanently damage biological tissues including DNA, the genetic material. Ionization only occurs with very high levels of electromagnetic energy such as X-rays and gamma rays. Often the term radiation is used when discussing ionizing radiation (such as that associated with nuclear power plants).

The energy levels associated with radiofrequency energy, including both radio waves and microwaves, are not great enough to cause the ionization of atoms and molecules. Therefore, RF energy is a type of non-ionizing radiation. Other types of non-ionizing radiation include visible light, infrared radiation (heat) and other forms of electromagnetic radiation with relatively low frequencies.

Large amounts of RF energy can heat tissue. This can damage tissues and increase body temperatures. Two areas of the body, the eyes and the testes, are particularly vulnerable to RF heating because there is relatively little blood flow in them to carry away excess heat.

The amount of RF radiation routinely encountered by the general public is too low to produce significant heating or increased body temperature. Still, some people have questions about the possible health effects of low levels of RF energy. It is generally agreed that further research is needed to determine what effects actually occur and whether they are dangerous to people. In the meantime, standards-setting organizations and government agencies are continuing to monitor the latest scientific findings to determine whether changes in safety limits are needed to protect human health.

FDA, EPA and other US government agencies responsible for public health and safety have worked together and in connection with WHO to monitor developments and identify research needs related to RF biological effects.

What levels of RF energy are considered safe?

Various organizations and countries have developed standards for exposure to radiofrequency energy. These standards recommend safe levels of exposure for both the general public and for workers. In the United States, the FCC has used safety guidelines for RF environmental exposure since 1985.

The FCC guidelines for human exposure to RF electromagnetic fields are derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurements (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy.

Many countries in Europe and elsewhere use exposure guidelines developed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The ICNIRP safety limits are generally similar to those of the NCRP and IEEE, with a few exceptions. For example, ICNIRP recommends different exposure levels in the lower and upper frequency ranges and for localized exposure from certain products such as hand-held wireless telephones. Currently, the World Health Organization is working to provide a framework for international harmonization of RF safety standards.

The NCRP, IEEE, and ICNIRP all have identified a whole-body Specific Absorption Rate (SAR) value of 4 watts per kilogram (4 W/kg) as a threshold level of exposure at which harmful biological effects may occur. Exposure guidelines in terms of field strength, power density and localized SAR were then derived from this threshold value. In addition, the NCRP, IEEE, and ICNIRP guidelines vary depending on the frequency of the RF exposure. This is due to the finding that whole-body human absorption of RF energy varies with the frequency of the RF signal. The most restrictive limits on whole-body exposure are in the frequency range of 30-300 MHz where the human body absorbs RF energy most efficiently. For products that only expose part of the body, such as wireless phones, exposure limits in terms of SAR only are specified.

The exposure limits used by the FCC are expressed in terms of SAR, electric and magnetic field strength, and power density for transmitters operating at frequencies from 300 kHz to 100 GHz. The specific values can be found in two FCC bulletins, OET Bulletins 56 and 65: **http://www.fcc.gov/oet/info/documents/bulletins/#56**; **http://www.fcc.gov/oet/info/documents/bulletins/#65**.

Why has the FCC adopted guidelines for RF exposure?

The FCC authorizes and licenses products, transmitters, and facilities that generate RF and microwave radiation. It has jurisdiction over all transmitting services in the U.S. except those specifically operated by the Federal Government. While the FCC does not have the expertise to determine radiation exposure guidelines on its own, it does have the expertise and authority to recognize and adopt technically sound standards promulgated by other expert agencies and organizations, and has done so. (Our joint efforts with the FDA in developing this Website is illustrative of the kind of inter-agency efforts and consultation we engage in regarding this health and safety issue.)

Under the National Environmental Policy Act of 1969 (NEPA), the FCC has certain responsibilities to consider whether its actions will significantly affect the quality of the human environment. Therefore, FCC approval and licensing of transmitters and facilities must be evaluated for significant impact on the environment. Human exposure to RF radiation emitted by FCC-regulated transmitters is one of several factors that must be considered in such environmental evaluations. In 1996, the FCC revised its guidelines for RF exposure as a result of a multi-year proceeding and as required by the Telecommunications Act of 1996.

Radio and television broadcast stations, satellite-earth stations, experimental radio stations and certain wireless communication facilities are required to undergo routine evaluation for RF compliance when they submit an application to the FCC for construction or modification of a transmitting facility or renewal of a license. Failure to comply with the FCC's RF exposure guidelines could lead to the preparation of a formal Environmental Assessment, possible Environmental Impact Statement and eventual rejection of an application. Technical guidelines for evaluating compliance with the FCC RF safety requirements can be found in the FCC's OET Bulletin 65. **http://www.fcc.gov/oet/info/documents/bulletins/#65**.

Low-powered, intermittent, or inaccessible RF transmitters and facilities are normally excluded from the requirement for routine evaluation for RF exposure. These exclusions are based on standard calculations and measurement data indicating that a transmitting station or equipment operating under the conditions prescribed is unlikely to cause exposures in excess of the guidelines under normal conditions of use. Such exclusions are

not exclusions from compliance, but, rather, exclusions from routine evaluation. The FCC's policies on RF exposure and categorical exclusion can be found in Section 1.1307(b) of the FCC's Rules and Regulations [(47 CFR 1.1307(b)].

How can I obtain the Specific Absorption Rate (SAR) value for my wireless phone?

The FCC requires that wireless phones sold in the United States demonstrate compliance with human exposure limits adopted by the FCC in 1996. The relative amount of RF energy absorbed in the head of a wireless telephone-user is given by the Specific Absorption Rate (SAR), as explained above. The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg) in terms of SAR.

Information on SAR for a specific phone model can be obtained for many recently manufactured phones using the FCC identification (ID) number for that model. The FCC ID number is usually printed somewhere on the case of the phone. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the ID number, go to the following Web address: **www.fcc.gov/oet/fccid**. On this page, you will see instructions for entering the FCC ID number. Type the FCC ID number exactly as requested (the Grantee Code is the first three characters, the Equipment Product Code is the rest of the FCC ID number). Then click on "Start Search." The "Grant of Equipment Authorization" for your telephone should appear. Read through the grant for the section on "SAR Compliance," "Certification of Compliance with FCC Rules for RF Exposure" or similar language. This section should contain the value(s) for typical or maximum SAR for your phone.

Phones and other products authorized since June 2, 2000, should have the maximum SAR levels noted directly on the "Grant of Equipment Authorization." For phones and products authorized between about mid-1998 and June 2000, detailed information on SAR levels is typically found in the exhibits associated with the grant. Once a grant is accessed, the exhibits can be viewed by clicking on "View Exhibit." Grants authorized prior to 1998 are not part of the electronic database but, rather, have been documented in the form of paper records.

The FCC database does not list phones by model number. However, consumers may find SAR information from other sources as well. Some wireless phone manufacturers make SAR

information available on their own Websites. In addition, some non-government Websites provide SARs for specific models of wireless phones. However, the FCC has not reviewed these sites and makes no guarantees of their accuracy. Finally, phones certified by the Cellular Telecommunications and Internet Association (CTIA) are required to provide SAR information to consumers in the instructional materials that come with the phones.

Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike "hand-free" kits, these so-called "shields" may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

What are wireless telephone base stations?

Fixed antennas used for wireless telecommunications are referred to as cellular base stations, cell stations, PCS ("Personal Communications Service") stations or telephone transmission towers. These base stations consist of antennas and electronic equipment. Because the antennas need to be high in the air, they are often located on towers, poles, water tanks, or rooftops. Typical heights for freestanding base station towers are 50-200 feet.

Some base stations use antennas that look like poles, 10 to 15 feet in length, that are referred to as "omni-directional" antennas. These types of antennas are usually found in rural areas. In urban and suburban areas, wireless providers now more commonly use panel or sector antennas for their base stations. These antennas consist of rectangular panels, about 1 by 4 feet in dimension. The antennas are usually arranged in three groups of three antennas each. One antenna in each group is used to transmit signals to wireless phones, and the other two antennas in each group are used to receive signals from wireless phones.

At any base station site, the amount of RF energy produced depends on the number of radio channels (transmitters) per antenna and the power of each transmitter. Typically, 21 channels per antenna sector are available. For a typical cell site using sector antennas, each of the three transmitting antennas could be connected to up to 21 transmitters for a total of 63 transmitters. However, it is unlikely that all of the transmitters would be transmitting at the same time. When omni-directional antennas are used, a cellular base station could theoretically use up to 96 transmitters, but this would be very unusual, and, once again, it is unlikely that all transmitters would be in operation simultaneously. Base stations used for PCS communications generally require fewer transmitters than those used for cellular radio transmissions, since PCS carriers usually have a higher density of base station antenna sites.

Are wireless telephone base stations safe?

The electromagnetic RF signals transmitted from base station antennas stations travel toward the horizon in relatively narrow paths. For example, the radiation pattern for an antenna array mounted on a tower can be likened to a thin pancake centered around the antenna system. The individual pattern for a single array of sector antennas is wedge-

shaped, like a piece of pie. As with all forms of electromagnetic energy, the power decreases rapidly as one moves away from the antenna. Therefore, RF exposure on the ground is much less than exposure very close to the antenna and in the path of the transmitted radio signal. In fact, ground-level exposure from such antennas is typically thousands of times less than the exposure levels recommended as safe by expert organizations. So exposure to nearby residents would be well within safety margins.

Cellular and PCS base stations in the United States are required to comply with limits for exposure recommended by expert organizations and endorsed by government agencies responsible for health and safety. Measurements made near cellular and PCS base station antennas mounted on towers have confirmed that ground-level exposures are typically thousands of times less than the exposure limits adopted by the FCC. In fact, in order to be exposed to levels at or near the FCC limits for cellular or PCS frequencies an individual would essentially have to remain in the main transmitted radio signal (at the height of the antenna) and within a few feet from the antenna. This is, of course, very unlikely to occur.

When cellular and PCS antennas are mounted on rooftops, RF levels on that roof or on others near by would probably be greater than those typically encountered on the ground. However, exposure levels approaching or exceeding safety guidelines should be encountered only very close to or directly in front of the antennas. In addition, for sector-type antennas, typically used for such rooftop base stations, RF levels to the side and in back of these antennas are insignificant. General guidelines on antenna installations and circumstances that might give rise to a concern about an facility's conformance with FCC regulations can be found in A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance. This Guide can be accessed at: http**://www.fcc.gov/oet/rfsafety**.

Who regulates exposure to radiation from microwave ovens, television sets and computer monitors?

The Food and Drug Administration is responsible for protecting the public from harmful radiation emissions from these consumer products.

Does the FCC routinely monitor radiofrequency radiation from antennas?

The FCC does not have the resources or the personnel to routinely monitor the emissions for all the thousands of transmitters that are subject to FCC jurisdiction. However, the FCC does have measurement instrumentation for evaluating RF levels in areas that may be accessible to the public or to workers. If there is evidence for potential non-compliance with FCC exposure guidelines for a FCC-regulated facility, staff from the FCC's Office of Engineering and Technology or the FCC Enforcement Bureau can conduct and investigation, and, if appropriate, perform actual measurements. Circumstances that could give rise to a concern about an facility's conformance with FCC regulations can be found in A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance. This Guide can be accessed at: **http://www.fcc.gov/oet/rfsafety**. Potential exposure problems should be brought to the FCC's attention by contacting the FCC RF Safety Program at: 202-418-2464 or by email: **rfsafety@fcc.gov**.

Does the FCC maintain a database that includes information on the location and technical parameters of all the transmitting towers it regulates?

Each of the FCC Bureaus maintains its own licensing database system for the service(s) it regulates (e.g., television, cellular service, satellite earth stations.) The FCC issues two types of licenses: site specific and market based. In the case of site specific licensed facilities, technical operating information is collected from the licensee as part of the licensing process. However, in the case of market based licensing (e.g., PCS, cellular), the licensee is granted the authority to operate a radio communications system in a geographic area using as many facilities as are required, and the licensee is not required to provide the FCC with specific location and operating parameters of these facilities.

Information on site specific licensed facilities can be found the "General Menu Reports" (GenMen) at **http://gullfoss2.fcc.gov/cgi-bin/ws.exe/genmen/index.hts**.

The various FCC Bureaus also publish on at least a weekly basis, bulk extracts of their licensing databases. Each licensing database has its own unique file structure. These extracts consist of multiple, very large files. The FCC's Office of Engineering and Technology (OET) maintains an index to these databases at **http://www.fcc.gov/oet/info/database/**

fadb.html. Entry points into the various databases include frequency, state/county, latitude/longitude, call-sign and licensee name. For further information on the Commission's existing databases, you can contact Donald Campbell at **dcampbel@fcc.gov** or 202-418-2405.

Can local and state governmental bodies establish limits for RF exposure?

Although some local and state governments have enacted rules and regulations about human exposure to RF energy in the past, the Telecommunications Act of 1996 requires the Federal Government to control human exposure to RF emissions. In particular, Section 704 of the Act states that, "No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." Further information on federal authority and FCC policy is available in a fact sheet from the FCC's Wireless Telecommunications Bureau at **www.fcc.gov/wtb**.

Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, FDA

could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Federal Communications Commission
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the primary subject of the safety questions discussed in this document.

What kinds of phones are the subject of this update?

The term "wireless phone" refers here to hand-held wireless phones with built-in antennas, often called "cell," "mobile," or "PCS" phones. These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures well within the FCC's compliance limits.

What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years' follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radiofrequency energy (RF).

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad

assessment of additional research needs in the context of the latest research developments around the world.

What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?

If there is a risk from these products--and at this point we do not know that there is--it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

- If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna.

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

What about wireless phone interference with medical equipment?

Radiofrequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI.

FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a "compatible" phone and a "compatible" hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

Which other federal agencies have responsibilities related to potential RF health effects?

Certain agencies in the Federal Government have been involved in monitoring, researching or regulating issues related to human exposure to RF radiation. These agencies include the Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the National Telecommunications and Information Administration (NTIA) and the Department of Defense (DOD).

By authority of the Radiation Control for Health and Safety Act of 1968, the Center for Devices and Radiological Health (CDRH) of the FDA develops performance standards for the emission of radiation from electronic products including X-ray equipment, other medical

devices, television sets, microwave ovens, laser products and sunlamps. The CDRH established a product performance standard for microwave ovens in 1971 limiting the amount of RF leakage from ovens. However, the CDRH has not adopted performance standards for other RF-emitting products. The FDA is, however, the lead federal health agency in monitoring the latest research developments and advising other agencies with respect to the safety of RF-emitting products used by the public, such as cellular and PCS phones.

The FDA's microwave oven standard is an emission standard (as opposed to an exposure standard) that allows specific levels of microwave leakage (measured at five centimeters from the oven surface). The standard also requires ovens to have two independent interlock systems that prevent the oven from generating microwaves the moment that the latch is released or the door of the oven is opened. The FDA has stated that ovens that meet its standards and are used according to the manufacturer's recommendations are safe for consumer and industrial use. More information is available from: **www.fda.gov/cdrh**.

The EPA has, in the past, considered developing federal guidelines for public exposure to RF radiation. However, EPA activities related to RF safety and health are presently limited to advisory functions. For example, the EPA now chairs an Inter-agency Radiofrequency Working Group, which coordinates RF health-related activities among the various federal agencies with health or regulatory responsibilities in this area.

OSHA is responsible for protecting workers from exposure to hazardous chemical and physical agents. In 1971, OSHA issued a protection guide for exposure of workers to RF radiation [29 CFR 1910.97]. However, this guide was later ruled to be only advisory and not mandatory. Moreover, it was based on an earlier RF exposure standard that has now been revised. At the present time, OSHA uses the IEEE and/or FCC exposure guidelines for enforcement purposes under OSHA's "general duty clause" (for more information see: **http://www.osha-slc.gov/SLTC/radiofrequencyradiation/index.html**).

NIOSH is part of the U.S. Department of Health and Human Services. It conducts research and investigations into issues related to occupational exposure to chemical and physical agents. NIOSH has, in the past, undertaken to develop RF exposure guidelines for workers,

but final guidelines were never adopted by the agency. NIOSH conducts safety-related RF studies through its Physical Agents Effects Branch in Cincinnati, Ohio.

The NTIA is an agency of the U.S. Department of Commerce and is responsible for authorizing Federal Government use of the RF electromagnetic spectrum. Like the FCC, the NTIA also has NEPA responsibilities and has considered adopting guidelines for evaluating RF exposure from U.S. Government transmitters such as radar and military facilities.

The Department of Defense (DOD) has conducted research on the biological effects of RF energy for a number of years. This research is now conducted primarily at the U.S. Air Force Research Laboratory located at Brooks Air Force Base, Texas. The DOD Website for RF biological effects information is listed with other sites in conjunction with a question on other sources of information, below.

Who funds and carries out research on the biological effects of RF energy?

Research into possible biological effects of RF energy is carried out in laboratories in the United States and around the world. In the U.S., most research has been funded by the Department of Defense, due to the extensive military use of RF equipment such as radar and high-powered radio transmitters. In addition, some federal agencies responsible for health and safety, such as the Environmental Protection Agency (EPA) and the U.S. Food and Drug Administration (FDA), have sponsored and conducted research in this area. At the present time, most of the non-military research on biological effects of RF energy in the U.S. is being funded by industry organizations. More research is being carried out overseas, particularly in Europe.

In 1996, the World Health Organization (WHO) established the International EMF Project to review the scientific literature and work towards resolution of health concerns over the use of RF technology. WHO maintains a Website that provides extensive information on this project and about RF biological effects and research (**www.who.ch/peh-emf**).

FDA, EPA and other US government agencies responsible for public health and safety have worked together and in connection with WHO to monitor developments and identify research needs related to RF biological effects.

How does FCC Audit Cell Phone RF?

After FCC grants permission for a particular cellular telephone to be marketed, FCC will occasionally conduct "post-grant" testing to determine whether production versions of the phone are being produced to conform with FCC regulatory requirements. The manufacturer of a cell phone that does not meet FCC's regulatory requirements may be required to remove the cell phone from use and to refund the purchase price or provide a replacement phone, and may be subject to civil or criminal penalties. In addition, if the cell phone presents a risk of injury to the user, FDA may also take regulatory action. The most important post-grant test, from a consumer's perspective, is testing of the RF emissions of the phone. FCC measures the Specific Absorption Rate (SAR) of the phone, following a very rigorous testing protocol. As is true for nearly any scientific measurement, there is a possibility that the test measurement may be less than or greater than the actual RF emitted by the phone. This difference between the RF test measurement and actual RF emission is because test measurements are limited by instrument accuracy, because test measurement and actual use environments are different, and other variable factors. This inherent variability is known as "measurement uncertainty." When FCC conducts post-grant testing of a cell phone, FCC takes into account any measurement uncertainty to when determining whether regulatory action is appropriate. This approach ensures that when FCC takes regulatory action, it will have a sound, defensible scientific basis.

FDA scientific staff reviewed the methodology used by FCC to measure cell phone RF, and agreed it is an acceptable approach, given our current understanding of the risks presented by cellular phone RF emissions. RF emissions from cellular phones have not been shown to present a risk of injury to the user when the measured SAR is less than the safety limits set by FCC (an SAR of 1.6 w/kg). Even in a case where the maximum measurement uncertainty permitted by current measurement standards was added to the maximum permissible SAR, the resulting SAR value would be well below any level known to produce an acute effect. Consequently, FCC's approach with measurement uncertainty will not result in consumers being exposed to any known risk from the RF emitted by cellular telephones.

FDA will continue to monitor studies and literature reports concerning acute effects of cell phone RF, and concerning chronic effects of long-term exposure to cellular telephone RF

(that is, the risks from using a cell phone for many years). If new information leads FDA to believe that a change to FCC's measurement policy may be appropriate, FDA will contact FCC and both agencies will work together to develop a mutually-acceptable approach.

Using Your Phone with a Hearing Aid Device

Your Sprint PCS* phone has been tested for hearing aid device compatibility. When some wireless phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

The wireless telephone industry has developed ratings for some of their mobile phones, to assist hearing device users in finding phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated will have the rating on the box. Your Treo 650 has an M3 rating.

Note:	Phones rated M3 or M4 meet FCC requirements and may generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to successfully use a phone that has been tested and rated as Hearing Aid compatible. Trying the phone with your hearing device is the best way to evaluate it for your personal needs. Should you experience interference when using your Treo 650 with your hearing device, Sprint suggests you promptly return the phone to the store. With the Sprint 14-day Risk-Free Guarantee you may return the phone within 14 days of purchase for a full refund. Sprint further suggests you experiment with multiple phones (even those not labeled with an M3 or M4) while in the retail store to find the one that works best with your hearing device.

Hearing devices may also be measured for immunity to this type of interference. Your hearing aid device manufacturer or hearing health professional may help you find results for your hearing device. The more immune your hearing aid is, the less likely you are to experience interference noise from wireless phones.

Owner's Record

The model number, regulatory number and serial number are located on a nameplate inside the battery compartment. Record the serial number in the space provided below. This will be helpful if you need to contact us about your phone in the future.

Model: Sprint PCS Vision℠ Smart Device Treo™ 650, by Palm

Serial No.:

User's Guide Proprietary Notice

CDMA Technology is licensed by QUALCOMM Incorporated under one or more of the following patents:

4,901,307   5,109,390   5,267,262   5,416,797

5,506,865   5,544,196   5,657,420   5,101,501

5,267,261   5,414,796   5,504,773   5,535,239

5,600,754   5,778,338   5,228,054   5,337,338

5,710,784   5,056,109   5,568,483   5,659,569

5,490,165   5,511,073

User's Guide template version 3D (04-08-04)

Terms and Conditions

In This Section

♦ **Terms and Conditions of Services**

♦ **Specifications**

Terms and Conditions of Services

Effective September 1, 2005

Thanks for choosing Sprint. These terms and conditions are part of your agreement with Sprint for PCS (CDMA) Services. Separate terms apply for any iDEN products or services.

Please note these terms may not be the most current version. You can get a current version of the terms on our Website at **www.sprint.com** or by requesting a copy from us at 1-888-211-4PCS.

A Para solicitar esta literatura en español, por favor contactar a 1-888-211-4PCS(4727).

General. This agreement ("Agreement") covers the terms on which we agree to provide and you agree to accept any service or product we make available to you, including your wireless services, wireless devices, etc. (collectively "Services"). You accept this Agreement when you do any of the following: (a) provide your written or electronic signature; (b) accept through an oral or electronic statement; (c) attempt to or in any way use any of the Services; (d) pay for any Services; or (e) open any materials or package that says you are accepting when you open it. The Agreement includes the terms in this document together with the terms associated with the Services you select (as described in our marketing materials, e.g., service plan brochures, or on our Website). You represent that you are at least 18 years old. In this document, we use the words "we," "us," "our" or "Sprint" to refer to Sprint Spectrum L.P. and its affiliates doing business as Sprint PCS.

Agreement. We may change the Agreement at any time with notice. Any changes to the Agreement are effective when we publish them. If you use our Services or make any payment to us on or after the effective date of the changes, you accept the changes. If we change a material term of the Agreement and that change has a material adverse effect on you, you may terminate the Agreement without an Early Termination Fee by calling 1-888-567-5528 within 30 days after the changes go into effect. You understand and agree that taxes, Universal Service fees and other charges imposed by the government or based on

government calculations may increase or decrease on a monthly basis, and that this paragraph does not apply to any increases in such taxes, Universal Service fees or other charges.

Activating Service. Before activation, we may check your credit and verify your identity. You must have and maintain satisfactory credit to receive and continue to receive Services. We may charge a nonrefundable activation fee, deposit, prepayment or other fee to establish or maintain Services.

Term Commitments. Unless we specifically tell you otherwise, our service plans require that you maintain service for a minimum term ("Term Service Plan"), usually 1 or 2 years. After satisfying this minimum term, your service plan will continue on a month-to-month basis unless you have agreed to extend the term for additional period(s). Certain service, promotional or product offers may require that you agree to or extend a Term Service Plan. As discussed below, we may charge you an Early Termination Fee if you deactivate a Term Service Plan before the end of the term.

Using Services. You agree to not use our Services in an unlawful, fraudulent or abusive manner. You may not resell or lease Services to anyone. Sprint is not responsible for any opinions, advice, statements, services applications or other information provided by third parties and accessible through our various Services, including the internet. Neither Sprint, its vendors or licensors guarantees the accuracy, completeness or usefulness of information that is obtained through these Services. You are responsible for evaluating such content.

You are also responsible for any use of our Services through any wireless device on your account including, but not limited to, use by children or minors. We strongly recommend that you closely monitor any such usage.

Changing Services. Changes to Services will generally be effective at the start of your next full invoicing cycle. In certain instances, the changes may take place sooner, in which case your invoice will reflect pro-rated charges. Certain changes may be conditioned upon payment of an Early Termination Fee or certain other charges.

Termination of Services. Consistent with this Agreement: (a) we may terminate Services at any time with notice to you and, in certain instances, without notice; and (b) you may terminate Services at any time with prior notice to us. Except as otherwise provided in this Agreement, IF YOU TERMINATE YOUR **TERM SERVICE PLAN** EARLY, OR WE DO SO FOR GOOD CAUSE, YOU WILL BE REQUIRED TO PAY THE APPLICABLE EARLY TERMINATION FEE ASSOCIATED WITH YOUR SERVICES. We will not charge an Early Termination Fee for deactivations consistent with our Return Policy or for service plans being provided on a month-to-month basis. If any Services are terminated before the end of your current invoicing cycle, we will not prorate charges to the date of termination, and you will not receive a credit or refund for any unused Services.

Wireless Devices, Numbers & E-mail Addresses. We did not manufacture your wireless device and we are not responsible for any defects or for the acts or omissions of the manufacturer. The only warranties on your device are any limited warranties extended by the manufacturer directly to you or passed on to you through us. Your device may not accept Services directly from any other carrier. You do not have any rights to any number, e-mail address or other identifier we may assign to your device or account; you may not modify, change or transfer any of these except as we allow or as allowed for by law. In certain instances, you may transfer your number from another carrier to us, or from us to another carrier. We do not guarantee that transfers to or from us will be successful. If you transfer your number away from us, the terms of this Agreement (e.g., Early Termination Fee, etc.) still apply. If a transfer to Sprint is not successful, you will be responsible for any discounts provided to you with the purchase of your device. See our printed in-store materials or visit **www.sprint.com** for additional important information on number transfers.

Coverage. Available coverage areas for Services are generally identified in our mapping brochures and at **www.sprint.com**. This may include coverage on our digital network (the "Nationwide Sprint PCS Network") as well as coverage we make available to you through agreements with other carriers ("off network" or "roaming" coverage).

All coverage maps are high level representations of outdoor coverage and there are gaps in coverage within areas shown as covered on the maps. Coverage is not available everywhere, nor can we guarantee you will receive coverage at all times, or without interruptions or

delays (e.g., dropped calls, blocked calls, etc.) in the coverage areas we identify. Actual coverage and quality of Services may be affected by conditions within or beyond our control, including network problems, software, signal strength, your equipment, structures (including buildings in which you may be located), atmospheric, geographic, or topographic conditions.

Roaming Coverage. You are roaming anytime your phone indicates that you are roaming. Roaming coverage is only available with certain devices and, unless included as part of your Services, will result in additional charges. Roaming calls placed "manually" (through an operator or with a credit card) will always incur separate and additional charges. Depending on your phone settings, you may automatically roam if there is a gap or interruption in coverage within the Nationwide Sprint PCS Network coverage area and roaming coverage areas. See your phone guide for how to adjust phone settings. Certain features and services may not be available in roaming coverage areas (including Sprint PCS Vision, voicemail, call waiting, call forwarding, etc.).

Charges. Carefully review the terms of your Services. You will be assessed charges based on the terms of your Services including, without limitation, monthly recurring charges and charges based on actual usage (e.g., charges for long distance, roaming, call forwarding, directory assistance, etc.). Airtime and other time based usage charges are calculated from when your device first initiates contact with a network until the network connection is broken, whether or not you were actually successful in connecting to the intended destination. However, you will not be charged for voice calls that ring and do not pick up, or if you get a busy signal. For voice calls received by your device, you are charged from the time shortly before the phone starts ringing until the call is terminated. You are charged for an entire voice call based on the time period in which the call is initiated. **Partial minutes of use are rounded up to the next minute.**

Sprint PCS Vision Charges. Vision usage is measured in bytes, not in minutes. Bytes are rounded up to kilobytes. Usage rounding occurs at the top of each clock hour while in a session and at the end of each session and is then charged to you based on the terms of your Services. Depending on your Services, usage may be charged against an allowance or on a fixed price per kilobyte. Usage charges may be rounded up to the next cent at monthly or

other intervals. In certain instances, you may not know that your session has not ended. As long as your device is connected to our network, you will incur data usage charges. You will be charged for all data directed to the internet address (or "IP address") assigned to your device, regardless of who initiates the activity or whether your device actually receives the data. This includes, but is not limited to, the amount of data associated with the particular information/item (e.g. game, ringer, email, etc.), additional data used in accessing, transporting and routing this information/item on our network, data from partial or interrupted downloads, re-sent data, and data associated with unsuccessful attempts to reach Websites or use applications. Based on these and a number of other factors (e.g., the specific application, network performance, etc.) data used and charged to you will vary widely, even for the same activity. Estimates of data usage – for example, the size of downloadable files – will not be accurate or a reliable predictor of actual usage. Your invoice will not separately identify the number of kilobytes attributable to your use of specific sites, sessions or services.

Taxes and Surcharges. We invoice you for taxes, fees and other charges levied by or remitted directly to federal, state, local or foreign governments including, without limitation, sales, gross receipts, Universal Service, use, and excise taxes. If you claim any tax exemption, you must provide us with a valid tax-exempt document. Tax exemptions are not applied retroactively. We also invoice you for surcharges that we collect and keep to pay for the costs of complying with government programs such as number pooling and portability, and Enhanced 911 service; these charges are not the taxes nor government imposed assessments.

Invoicing & Payment. Invoicing cycles and dates may change from time to time. Monthly recurring and related charges for Services are generally invoiced one invoicing cycle in advance. Other charges are invoiced soon after they are incurred. Most usage is generally applied to the invoicing cycle in which they are incurred, but in some instances may be applied to subsequent invoicing cycles. You are responsible for all charges associated with any device activated on your account, regardless of who used the device. You must pay all charges by the due date on the invoice. *Past due amounts accrue late charges until paid at the rate of 5% per month or at the highest rate allowed by law and may result in immediate*

suspension of your account. If you agree to any auto-payment option through banking or credit account, we may initiate payment from the account for all amounts we invoice you without additional authorization or notice. Based on your credit or payment history, we may require certain forms of guaranteed payment as a condition of maintaining Services. If we invoice you for amounts on behalf of a third-party, payments received are first applied to amounts due to us. You may be charged additional fees for certain methods of payment and for payments denied by a financial institution. Acceptance of payments (even if marked "paid in full") does not waive our right to collect all amounts that you owe us.

Disputed Charges. Disputes concerning any charges invoiced must be raised within 60 days of the date of the invoice. You accept all charges not disputed in this time period. Disputes can only be made by calling or writing us as directed on your invoice.

Account Spending Limit & Deposits. We may impose an account spending limit ("ASL") on any account without notice. We will notify you of an ASL based on your credit or payment history and may reduce the ASL at any time with prior notice. An ASL should not be relied on to manage usage on your account. We may suspend an account without prior notice when the account balance reaches the ASL, even if the account is not past due. Services can be restored upon payment of an amount that brings the account balance below the ASL and any past due amounts. If we require a deposit for you to establish or maintain an account, we will hold the deposit as partial guarantee of payment for Services. We may change the deposit amount at any time with notice for good reason. Except as we allow, a deposit may not be used to pay any invoice or delay payment. The deposit amount, the length of time we hold the deposit and changes to the deposit amount are determined based on your credit and payment history. The rate of interest, if any, on the deposit is subject to change. We may mix deposits with our other funds. If your account is terminated for any reason, we may without notice apply your deposit to any outstanding charges. We may send any remaining deposit amounts to your last known address within 75 days after account termination. If the funds are returned to us, you may claim these funds for one year from the date of return. Any money held during this one-year period will not accrue interest for your benefit and are subject to a servicing fee charged against the balance. You forfeit any portion of the money left after the one-year period.

Other Sprint PCS Vision Terms. You will not receive voice calls while using Vision. Vision is not available for use with server devices or host computer applications, other systems that drive continuous heavy traffic or data sessions, or as substitutes for private lines or frame relay connections. Unlimited Vision plans/options may not be used with Sprint PCS phones or smart phones being used as a modem in connection with other equipment (e.g., computers, etc.) through use of connection kits or other phone-to-computer/PDA accessories, or Bluetooth or other wireless technology. We may terminate services without notice for any misuse. You may have access to certain games, ringers, screen savers and other items on our Vision site ("Premium Services") that are available for an additional charge. You will be billed for Premium Service purchases on your Sprint PCS invoice based on the charges as specified at purchase. Subject to the terms of the content purchased, we may delete premium and non-premium items downloaded to any storage areas we may provide, including any pictures, games and other content. We may limit the amount of Premium Services you may purchase in a specific timeframe (month, week, day, or other time period).

Voice Command. Calls to 911 or similar emergency numbers cannot be placed through the Voice Command feature. See our printed in-store materials or visit **www.sprint.com** for additional important information on this option.

Wireless Web. Wireless Web Services may be available depending on your device and Service plan/option. This is not a Vision service. Usage is calculated on minutes used and generally deducts from your Service plan minutes. See our printed in-store materials or visit **www.sprint.com** for additional important information on this option.

Lost or Stolen Equipment. If your device is lost or stolen, please notify us immediately by calling 1-888-211-4PCS. *You are responsible for all charges incurred before you notify us of the loss or theft*. You agree to cooperate reasonably with us in investigating suspected unlawful or fraudulent use.

Messaging. You may incur charges in accessing, sending or receiving messages on your device. We may impose limits on the number of voicemail, text, email or other messages that can be retained through your account. Indicators of messages on your device, including

mailbox icons, may not always provide an up to date indication of new messages and you may at times need to manually reset or clear your mailbox indicator. Legitimate messages may be interrupted by software aimed at prevention of SPAM or similar messages.

Caller ID. If you do not want people you call to receive the number assigned to your phone, call us at 1-888-211-4PCS for information about automatic Caller ID blocking. The number assigned to your phone can be blocked on a per-call basis by dialing *67 + Destination Number + TALK (or similar key). Caller ID blocking is not available when using Vision or Wireless Web services.

TTY Access. A TTY (also known as TDD or Text Telephone) is a telecommunications device that allows people who are deaf or hard of hearing, or who have speech or language disabilities, to communicate by telephone. TTY doesn't work with all devices. If you have a TTY-capable device, it may not function effectively, or at all, when attempting 911 calls and should not be relied on for such calls.

Disclaimer of Warranties. WE MAKE NO REPRESENTATIONS OF WARRANTIES, EXPRESS OR IMPLIED, INCLUDING (TO THE EXTENT ALLOWED BY LAW) ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE CONCERNING YOUR SERVICES OR WIRELESS DEVICE. WE DO NOT PROMISE UNINTERRUPTED OR ERROR-FREE SERVICES AND YOU AGREE TO HOLD US HARMLESS FOR ALL SUCH PROBLEMS.

Limitation of Liability. Neither we nor our vendors, suppliers or licensors are liable for any damages arising out of or in connection with any: (a) act or omission by your, or another person or company; (b) providing or failing to provide Services, including deficiencies or problems with your wireless device, our network coverage or Services (e.g., dropped, blocked, interrupted calls/messages, etc.); (c) traffic or other accidents, or any health-related claims allegedly arising from the use of Services, any wireless devices or related accessories; (d) content or information accessed while using our Services, such as through the internet; (e) interruption or failure in accessing or attempting to access emergency services from your phone, including through 911, E911 or otherwise; or (f) events due to factors beyond our control, including acts of God (including, without limitation, weather-related phenomena, fire or earthquake), war, riot, strike, or orders of governmental authority. **In the event we are**

found to be responsible to you for monetary damages relating to the Services (including wireless devices), you agree that any such damages will not exceed the pro-rated monthly recurring charge for your Services during the affected period.

NO CONSEQUENTIAL OR OTHER DAMAGES. UNDER NO CIRCUMSTANCES ARE WE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OF ANY NATURE WHATSOEVER ARISING OUT OF OR IN CONNECTION WITH PROVIDING OR FAILING TO PROVIDE SERVICES, PHONES OR OTHER EQUIPMENT USED IN CONNECTION WITH THE SERVICES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, LOSS OF BUSINESS, OR COST OF REPLACEMENT PRODUCTS AND SERVICES. THIS SECTION SURVIVES TERMINATION OF THIS AGREEMENT.

MANDATORY ARBITRATION OF DISPUTES. INSTEAD OF SUING IN COURT, YOU AND SPRINT AGREE TO ARBITRATE ANY AND ALL CLAIMS, CONTROVERSIES OR DISPUTES AGAINST EACH OTHER ARISING OUT OF OR RELATING TO THIS AGREEMEN, INCLUDING, WITHOUT LIMITATION, THE SERVICES, ANY PHONES/EQUIPMENT, OR ADVERTISING, EVEN IF IT ARISES AFTER YOUR SERVICES HAVE TERMINATED, AND INCLUDING CLAIMS YOU MAY BRING AGAINST SPRINT'S EMPLOYEES, AGENTS, AFFILIATES OR OTHER REPRESENTATIVES, OR THAT SPRINT MAY BRING AGAINST YOU ("CLAIMS"). THE FEDERAL ARBITRATION ACT APPLIES TO THIS AGREEMENT AND ITS PROVISIONS, NOT STATE LAW, GOVERN ALL QUESTIONS OF WHETHER A CLAIM IS SUBJECT TO ARBITRATION. THIS PROVISION DOES NOT PREVENT EITHER YOU OR SPRINT FROM BRINGING APPROPRIATE CLAIMS IN SMALL CLAIMS COURT, BEFORE THE FEDERAL COMMUNICATIONS COMMISSION OR A STATE PUBLIC UTILITIES COMMISSION.

YOU AND SPRINT FURTHER AGREE THAT NEITHER SPRINT NOR YOU WILL JOIN ANY CLAIM WITH THE CLAIM OF ANY OTHER PERSON OR ENTITY IN A LAWSUIT, ARBITRATION OR OTHER PROCEEDING; THAT NO CLAIM EITHER SPRINT OR YOU HAS AGAINST THE OTHER SHALL BE RESOLVED ON A CLASS-WIDE BASIS; AND THAT NEITHER SPRINT NOR YOU WILL ASSERT A CLAIM IN A REPRESENTATIVE CAPACITY ON BEHALF OF ANYONE ELSE. IF FOR ANY REASON THIS ARBITRATION PROVISION DOES NOT APPLY TO A CLAIM, WE AGREE TO WAIVE TRIAL BY JURY.

A single arbitrator engaged in the practice of law will conduct the arbitration. The arbitration will be filed with and the arbitrator will be selected according to the rules of either JAMS or the National Arbitration Forum ("NAF"), or, alternatively, as we may mutually agree. We agree to act in good faith in selecting an arbitrator. The arbitration will be conducted by and under the then-applicable rules of JAMS or NAF, wherever the arbitration is filed or, if the arbitrator is chosen by mutual agreement of the parties, the then-applicable rules of JAMS will apply unless the parties agree otherwise. All expedited procedures prescribed by the applicable rules will apply. We agree to pay our respective arbitration costs, except as otherwise required by rules of JAMS or NAF, as applicable, but the arbitrator can apportion these costs as appropriate. The arbitrator's decision and award is final and binding, and judgment on the award may be entered in any court with jurisdiction.

If any party files a judicial or administrative action asserting a claim that is subject to arbitration and another party successfully stays such action or compels arbitration, the party filing that action must pay the other party's costs and expenses incurred in seeking such stay or compelling arbitration, including attorneys' fees.

If any portion of this Mandatory Arbitration of Disputes section is determined to be invalid or unenforceable, the remainder of the Section remains in full force and effect.

Miscellaneous. You may notify us by calling us at 1-888-211-4PCS, or use that number to get our current address for written notice. We may send you notice to your last known address in our invoicing records, or by calling leaving you a voice message on your wireless device or home phone. Properly addressed written notice is effective three days after deposit in the U.S. mail, postage prepaid. This Agreement is governed by and must be construed under federal law and the laws of the State of Kansas, without regard to choice of law principles. If either of us waives or fails to enforce any requirement under this Agreement in any one instance, that does not waive our right to later enforce that requirement. If any part of this Agreement is held invalid or unenforceable, the rest of this Agreement remains in full force and effect. Section headings are for descriptive, non-interpretive purposes only. You may not assign this Agreement to any other person or entity without our prior written approval. This Agreement (including any referenced documents and attachments) makes up the entire agreement between us and replaces all prior written or spoken agreements.

Specifications

Radio	CDMA 1900/800 digital dual-band	
Phone features	Personal speakerphone Hands-free headset jack (2.5mm, 3-barrel connector)	Microphone mute option TTY compatible 3-way calling
Processor technology	Intel PXA270 312MHz processor	
Expansion	SD/MultiMediaCard/SDIO card slot	
Battery	Rechargeable Lithium Ion 4 hours full charge time	up to 4.5 hours talk time up to 300 hours standby time
Palm OS version	Palm OS® 5.4	
Camera (if included)	VGA resolution (640x480), 0.3 megapixel Automatic light balance	
Size/ weight	4.4" x 2.3" x 0.9" without antenna (11.3 cm x 5.9 cm x 2.3 cm) 6.3 ounces (178 g)	
Connectivity	Bluetooth wireless technology	IR
Display	Touch-sensitive LCD CSTN screen (includes stylus) 65,536 colors (16-bit color) User-adjustable brightness	
Keyboard	Built-in QWERTY keyboard plus 5-way navigator Backlight for low lighting conditions	

Included software	Phone (including Palm OS Contacts, Favorites, Dial Pad)	Messaging (text/pictures)
		Calculator (basic/advanced)
	Sprint PCS Picture Mail (camera/messages)	Memos
		World Clock
	Web browser (Internet)	Palm® Desktop software/HotSync® Manager
	Sprint PCS Business Connect℠	
	VersaMail® (email)	
	Calendar	
	Tasks	
System requirements	Windows 2000 or XP with USB port	
	Mac OS 10.2–10.3.x with USB port	
	Later versions may also be supported	
Temperature ranges	32°F to 104°F (0°C to 40°C)	5% to 90% RH

Index

Index

Index